

Notice of Modification

Section 75W of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation executed on 28 May 2011, we the Planning Assessment Commission of New South Wales (the Commission) approve the modification of the project application referred to in Schedule 1, as set out in Schedule 2.

Member of the Commission

Member of the Commission

Member of the Commission

Sydney

2011

File No: 10/0642

SCHEDULE 1

Application Number:	MP06_0228
Proponent:	Shoalhaven Starches Pty Ltd
Approval authority:	Minister for Planning
Project:	Shoalhaven Starches Expansion Project
Date of original approval:	29 January 2010
Modification:	MP06_0228 MOD 1 – Deletion of DDG Pelletiser

SCHEDULE 2

The project approval is modified in the following manner:

Definitions

- 1) Delete the definition for DECC and replace it with:

OEH	Office of Environment and Heritage
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- 2) Replace all references to “DECC” with “OEH”

- 3) Insert the following definition:

GHD Report (October 2007)	<i>Environmental Audit Odour Sources</i> report dated October 2007 prepared for Shoalhaven Starches by GHD Pty Ltd to address Land and Environment Court judgment 2 November 2006.
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Schedule 2

- 4) Replace condition 2 of Schedule 2 with the following:

2. The Proponent shall carry out the project generally in accordance with the:
- EA and associated site plans (see Appendix 2);
 - amended modification proposal prepared by ME Engineering Pty Ltd, 21 December 2010;
 - statement of commitments; and
 - conditions of this approval.

Schedule 3

5) Insert conditions 3A and 3B immediately following condition 3 of Schedule 3:

- 3A. Prior to commissioning the duct work that directs additional emissions from the evaporator plant area and load-out chute to the bio-filter (as identified in the amended modification proposal) the Proponent must demonstrate to the satisfaction of the Director General and the OEH that the bio-filter can accommodate the additional load while maintaining acceptable treatment performance.
- 3B. Should the Proponent opt to install a DDG pelletising plant as identified in the additional odour controls in Appendix 3 the plant must comply with all regulatory requirements including air and odour emissions standards that are in force at the time of installation. Compliance must be demonstrated to the satisfaction of the Director-General and OEH before installation work begins.

6) Insert condition 4A immediately following condition 4 of Schedule 3:

- 4A. Prior to increasing ethanol production the Odour Management Plan for the project must be updated to the satisfaction of the Director General to include the additional Appendix 3 mandatory odour controls specified in the modification approval *MOD 1 – Deletion of DDG Pelletiser*.

Appendix 3

7) Delete from the Mandatory odour controls in Appendix 3:

- Pelletise DDG product and fit heavy curtains to openings in the DDG product storage shed and load-out tent.

8) Insert in the Mandatory odour controls in Appendix 3:

- Install a ducting system in the DDG plant to collect odorous discharges from the sources listed in the GHD Report (October 2007) and direct them to at least 2 of the boilers. Existing connections from the non-condensables discharge fans and cyclone transfer fans must remain connected to the boilers.
- Re-route the Palmer cooler discharge stack to at least 2 of the boilers.
- Install a ducting system to collect all odorous discharges nominated in the GHD Report (October 2007) for the evaporator plant area and direct them to a new bio-filter via a venturi scrubber and cyclone separator.
- Modify the DDG load-out area in the following manner:
 - Extend the existing load-out awning to the south and fit each end of the shed with a motorised roller door configured such that at all times either the north or south door will be closed when a truck is loading DDG to prevent a wind tunnel effect and powder drifting out of the load-out area.
 - Install the truck load-out chutes with Moduflex Bellow Feeders fitted with a dust extraction system to collect dust at the chute discharge and duct it to the bio-filter.

9) Replace “load out tent” with “load out shed” in the Additional odour controls in Appendix 3,

10) Insert in the Additional odour controls in Appendix 3:

- Pelletise DDG product.
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Project Approval (Consolidated)

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.

The Hon Kristina Keneally MP
Minister for Planning

Sydney

2009

SCHEDULE 1

Application No:	06_0228
Proponent:	Shoalhaven Starches Pty Ltd
Approval Authority:	Minister for Planning
Land:	The land listed in Appendix 1
Project:	Shoalhaven Starches Expansion Project

MP06_0228 MOD 1 – Deletion of DDG Pelletiser

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DEFINITIONS

BCA	Building Code of Australia
Council	Shoalhaven City Council
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
DDG	Dried Distillers Grain
Department	Department of Planning
Director-General	Director-General of the Department (or delegate)
DWE	Department of Water and Energy
EA	The environmental assessment titled <i>Proposed Ethanol Production Upgrade Including Proposed Odour Reduction and Waste Water Treatment Measures For Existing Shoalhaven Starches Operations</i> , prepared by Cowman Stoddart Pty Ltd, and dated August 2008; and the associated response to submissions, prepared by Cowman Stoddart Pty Ltd, and dated October 2008
EP&A Act	<i>Environmental Planning & Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning & Assessment Regulation 2000</i>
EPL	Environmental Protection Licence
Evening	The period from 6pm to 10pm
GHD Report (October 2007)	<i>Environmental Audit Odour Sources report dated October 2007 prepared for Shoalhaven Starches by GHD Pty Ltd to address Land and Environment Court judgment 2 November 2006.</i>
Incident	An incident causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this approval
Minister	Minister for Planning
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
Odour Control Works	The works described in Appendix 3
OEH	<i>Office of Environment and Heritage</i>
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Project	The development described in the EA, which includes the continued implementation of all existing and approved development on site
Proponent	Shoalhaven Starches Pty Ltd, or its successors
Reasonable and Feasible	Reasonable relates to the application of judgment in arriving at a decision, taking into account: mitigation benefits, costs 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
Site	The land referred to in Schedule 1
Statement of Commitments	The Proponent's commitments in the EA
VENM	Virgin Excavated Natural Material, as defined in the <i>Protection of the Environment Operations Act 1997</i>

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, operation or decommissioning of the project.

Terms of Approval

2. The Proponent shall carry out the project generally in accordance with the:
 - a) EA and associated site plans (see Appendix 2);
 - b) amended modification proposal prepared by ME Engineering Pty Ltd, 21 December 2010;
 - c) statement of commitments; and
 - d) conditions of this approval.
3. If there is any inconsistency between the above, 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.

Surrender of Existing Development Consents

5. 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.

Limits on Approval

6. (1) The Proponent must not produce on site:
 - a) more than 265,000 tonnes of industrial grade flour per year; and
 - b) more than 300 million litres of ethanol per year, subject to (2) below.
- (2) The proponent must not produce on site more than 126 million litres of ethanol per year except in accordance with a staged approval granted by the Director-General in accordance with condition 7.

Note: Prior to this approval, the proponent was allowed to produce up to 126 million litres of ethanol per year. Condition 7 below provides for the Director – General to approve increased production of ethanol in stages, firstly up to 200 million litres and then up to 300 million litres. Increased production will only be approved after an independent audit of the performance of the odour controls required by this approval and only if the Director General is satisfied that odour controls will be adequate for such an increase.

Staged Implementation of Increased Ethanol Production Rates

7. (1) The Proponent may apply to the Director-General for approval to increase ethanol production up to the rate of 200 million litres of ethanol a year on site if –
 - a) the mandatory odour controls listed in Appendix 3 to this Approval have been implemented; and
 - b) the Odour Management Plan required under condition 4 of Schedule 3 has been prepared to the satisfaction of the Director-General and is being implemented; and
 - c) an independent odour audit has been prepared and submitted in accordance with conditions 5 and 6 of Schedule 3; and
 - d) the proponent provides the Director-General with an assessment of the likely odour impacts of the proposed increase in ethanol production, using odour monitoring and predictive modelling.
- (2) The proponent may apply to the Director-General for approval to increase ethanol production from 200 million litres of ethanol a year on site up to 300 million litres of ethanol a year on site if –
 - a) the site has been producing 200 million litres per year in accordance with an approval granted by the Director-General under this condition; and

- b) an independent odour audit of the site operating at this rate has been prepared and submitted in accordance with conditions 5 and 6 of Schedule 3; and
 - c) the proponent has provided the Director-General with an assessment of the likely odour impacts of the proposed increase in ethanol production, using odour monitoring and predictive modelling.
- (3) An assessment provided to the Director-General in accordance with this condition –
 - a) must assess the effectiveness of the mandatory odour controls required under this approval; and
 - b) may assess the effectiveness of implementing additional odour controls (such as those listed in Appendix 3).
- (4) In deciding whether to approve an increase in ethanol production under this condition, the Director-General must –
 - a) assess the odour performance of the premises at its current rate of production; and
 - b) assess the likely odour impacts from the proposed increase; and
 - c) consider the requirement not to cause or permit the emission of offensive odours from the site as defined in section 129 of the POEO Act.

Structural Adequacy

- 8. The Proponent shall ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA.

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.*

Demolition

- 9. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*, or its latest version.

Protection of Public Infrastructure

- 10. The Proponent shall:
 - a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters, footpaths), in consultation with Council, and submit a copy of this report to the Department prior to the commencement of construction;
 - b) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the project; and
 - c) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the project.

Operation of Plant and Equipment

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

Progressive Submission of Documents

- 12. With the approval of the Director-General, the Proponent may submit to the Director-General for approval any plan, strategy, study, or program required by this consent on a progressive basis.

Development Contribution

- 13. Within 12 months of this approval, the Proponent shall pay Council a suitable contribution for the project that has been determined generally in accordance with any applicable Section 94 Contribution Plan. If there is a dispute about the amount of the contribution then either party may refer the matter to the Director-General for resolution.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

ODOUR

Offensive Odour

1. The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.

Implementation of Mandatory Odour Controls

2. Prior to increasing ethanol production rates on site above 126 million litres a year or within 12 months of this approval, whichever is sooner, the Proponent shall implement all the mandatory odour controls listed in Appendix 3 and described in detail in the Odour Management Plan (see condition 4 below), to the satisfaction of the Director-General.
3. The Proponent shall implement additional mandatory odour controls as may be directed by the Director-General, arising from the Department's assessment of any:
 - a) Independent Odour Audit (see condition 5 below);
 - b) Independent Environmental Audit (see condition 4 of schedule 4); or
 - c) any monitoring results, incidents or complaints related to the project.
- 3A. Prior to commissioning the duct work that directs additional emissions from the evaporator plant area and load-out chute to the bio-filter (as identified in the amended modification proposal) the Proponent must demonstrate to the satisfaction of the Director General and the OEH that the bio-filter can accommodate the additional load while maintaining acceptable treatment performance.
- 3B. Should the Proponent opt to install a DDG pelletising plant as identified in the additional odour controls in Appendix 3 the plant must comply with all regulatory requirements including air and odour emissions standards that are in force at the time of installation. Compliance must be demonstrated to the satisfaction of the Director-General and OEH before installation work begins.

Odour Management Plan

4. The Proponent shall prepare and implement an Odour Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - a) be prepared in consultation with OEH by a suitably independent, qualified and experienced expert whose appointment has been endorsed by the Director-General, and submitted to the Director-General for approval within 3 months of the date of this approval;
 - b) describe in detail the measures that would be implemented on site to control the odour impacts of the project, and to ensure that these controls remain effective over time;
 - c) identify triggers for remedial action; and
 - d) include a program for monitoring the odour impacts of the project.
- 4A. Prior to increasing ethanol production the Odour Management Plan for the project must be updated to the satisfaction of the Director General to include the additional Appendix 3 mandatory odour controls specified in the modification approval MOD 1 – Deletion of DDG Pelletiser.

Independent Odour Audit

5. Within 3 months of the implementation of the mandatory odour controls (see Appendix 3), and annually thereafter unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Odour Audit of the project. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Director-General. During the audit, this expert must:
 - a) consult with OEH and the Department;
 - b) audit the effectiveness of the odour controls on site in regard to protecting receivers against offensive odour;
 - c) review the Proponent's production data (that are relevant to the odour audit) and complaint records;
 - d) review the Odour Management Plan for the project;
 - e) measure all key odour sources on site, and compare the results of these measurements against the predictions in the EA;
 - f) determine whether the project is complying with the requirements in this approval; and, if necessary,
 - g) recommend and prioritise measures to either improve the odour controls on site and/or the Odour Management Plan, such that receivers would be protected against offensive odour from the site.

Note: The Director-General may vary the frequency of the audit depending on the performance of the project.

6. Within 6 weeks of the completion of this audit, the Proponent shall submit a copy of the audit report to both **OEHS** and the Department with a response to any recommendations contained in the audit report.

AIR QUALITY

General

7. The Proponent shall implement all reasonable and feasible measures to minimise the dust generated by the project.
8. During construction, the Proponent shall ensure that:
 - a) all trucks entering or leaving the site with loads have their loads covered; and
 - b) the trucks associated with the project do not track dirt onto the public road network.

Emission Limits - Boiler Stacks

9. The Proponent shall ensure that the emissions from the combined boiler stacks for Number 5 and 6 Boilers on site comply with the limits in the EPL.

Monitoring

10. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program must:
 - a) be prepared in consultation with **OEHS**;
 - b) be submitted to the Director-General for approval within 3 months of this approval; and
 - c) include a program to monitor the ongoing performance of the project.

NOISE

Hours of Operation

11. The Proponent shall comply with the restrictions in Table 1.

Table 1: Construction and Operation Hours for the Project

Activity	Day	Time
Construction	Monday – Friday	7:00am to 6:00pm
	Saturday	8:00am to 1:00pm
	Sunday and Public Holidays	Nil
Operation	All days	Any time

Note: Construction activities may be conducted outside the hours in Table 1 provided that the activities are not audible at any residence beyond the boundary of the site.

Noise Limits

12. The Proponent shall ensure that noise from the project does not exceed the noise limits in Table 2.

Table 2: Project Noise Limits

Location	Day/Evening/Night LA _{10(15 minute)} dB(A)
1 - Terara on the south side of the Shoalhaven River	38
2,3 & 4 - Nowra on the south side of the Shoalhaven River	38
5 - Meroo Street, Bomaderry	42
6 - Other residential locations in Bomaderry	40

Note: To interpret the locations referred to Table 2, see the map in Appendix 4. Noise generated by the project is to be measured in accordance with the relevant requirements of the NSW Industrial Noise Policy.

Noise Management Plan

13. During construction, the Proponent shall implement all reasonable and feasible measures to minimise the construction noise impacts of the project.
14. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:

- a) be prepared by a suitably qualified and experienced expert in consultation with **OEH**, and be submitted to the Director-General for approval within 3 months of this approval;
- b) describe the measures that would be implemented to control the noise impacts of the project;
- c) identify trigger levels for remedial action; and
- d) include a program to:
 - investigate ways to reduce the noise impacts of the project; and
 - monitor the noise impacts of the project using a combination of real-time and supplementary attended monitoring measures, which includes a protocol for evaluating compliance with the noise limits.

SOIL, WATER & ENERGY

Discharge Limits

15. Except as may be expressly provided in an EPL for the project, the Proponent shall:
- a) comply with Section 120 of the POEO Act; and
 - b) not discharge any wastewater, including treated wastewater to the Shoalhaven River.

Water & Energy Efficiency

16. The Proponent shall prepare and implement a Water Savings Action Plan and an Energy Savings Action Plan for the project to the satisfaction of the Director-General. These plans must be prepared:
- a) in consultation with DWE and be submitted to the Director-General for approval within 12 months of this approval; and
 - b) in accordance with the *Guidelines for Water Savings Action Plans (DEUS 2005)* and *Guidelines for Energy Savings Action Plans (DEUS 2005)*, respectively.

Bunding

17. The Proponent shall store all chemicals, fuels and oils used on site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund. These bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or DECC's *Storing and Handling Liquids: Environmental Protection* manual.

Note: To avoid any doubt, this condition does not apply to the fermenters on site.

Importation of Fill

18. The Proponent shall ensure that all imported fill is VENM.

Erosion and Sediment Control

19. The Proponent shall prepare and implement an Erosion and Sediment Control Plan for the project to the satisfaction of the Director-General. This plan must:
- a) be submitted to the Director-General before the commencement of construction on site;
 - b) be prepared in accordance with Landcom's *Managing Urban Stormwater: Soils and Construction* manual;
 - c) identify the works that could cause soil erosion and generate sediment;
 - d) describe the location, function, and capacity of the erosion and sediment controls that would be implemented; and
 - e) describe the measures that would be implemented to maintain these controls during the construction period.

Site Contamination

20. Prior to the commencement of construction, unless otherwise agreed by the Director-General, the Proponent shall demonstrate to the satisfaction of the Director-General that an accredited site auditor has prepared a site audit statement and summary site audit report and that the site is suitable for its intended use(s).

Acid Sulfate Soils

21. The Proponent shall prepare and implement an Acid Sulphate Soil Management Plan for the project to the satisfaction of the Director-General. The plan must be prepared in accordance with the *Acid Sulphate Soils Manual* (Acid Sulphate Soils Management Advisory Committee, 1998), and be submitted to the Director-General for approval prior to the commencement of construction.

Stormwater

22. The Proponent shall prepare and implement a Stormwater Management Plan for the project to the satisfaction of the Director-General. This plan must:

- a) be prepared in consultation with Council and be submitted to the Director-General for approval prior to the commencement of construction;
- b) be prepared in accordance with the latest version of *Managing Urban Stormwater: Council Handbook* (DECC);
- c) outline measures to manage stormwater to prevent the pollution of waters; and
- d) include detailed plans of the stormwater system.

Wastewater

- 23. The Proponent shall ensure runoff and spray from the irrigation of wastewater does not go beyond the boundary of the utilisation areas.
- 24. The Proponent shall ensure that the pollutants in the soils at the environmental farm do not exceed the soil quality impact assessment criteria outlined in the EPL for the project.
- 25. The Proponent shall prepare and implement a Wastewater Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - a) be prepared in consultation with **OE** and be submitted to the Director-General for approval within 12 months of this approval;
 - b) be prepared in accordance with DECC's *Environmental Guidelines: Use of Effluent by Irrigation*;
 - c) outline the location, design and management of the irrigation, crop and grazing system, including measures to minimise soil and groundwater degradation; and
 - d) include:
 - baseline data on soil and groundwater quality and characteristics;
 - wastewater and soil quality impact assessment criteria and the effluent treatment and irrigation system performance measures;
 - details of the wastewater, soil, silage and groundwater monitoring program;
 - procedures for the reporting the monitoring results against the criteria and to determine the annual site nutrient and analyte budgets and water balance;
 - contingency measures to address exceedances, pollutant triggers and problems with the wastewater management systems; and
 - a description how the effectiveness of actions would be monitored over time.

Flooding

- 26. The Proponent shall prepare a Flood Mitigation and Management Plan for the project to the satisfaction of the Director-General. This plan must:
 - a) be prepared in consultation with Council and be submitted to the Director-General for approval within 12 months of this approval;
 - b) include:
 - baseline data on local and regional flooding and the predicted flood impacts of the project;
 - details of all reasonable and feasible measures that would be implemented to minimise on-site and off-site flooding;
 - procedures for the monitoring, assessment and compensation of any flood impacts caused by the project;
 - a program for contribution toward the ALERT Flood Warning System operated by Council and the Bureau of Meteorology; and
 - procedures for collaboration and coordination with the paper mill with respect to flood emergency planning.

TRANSPORT

Upgrade Existing Accesses to Factory

- 27. Within 12 months of this approval, the Proponent shall:
 - a) upgrade the three accesses to the site off Bolong Road (marked in colour on the map in Appendix 5); and
 - b) clear and profile the road verges at the intersection of the site's access road and Hannigan's Lanes,
 to the satisfaction of Council and the RTA.

Note: Site accesses referred to in this condition are illustrated by the figure in Appendix 5.

Road Works to the Packing Plant

- 28. Prior to the commencement of operations at the proposed packing plant, the Proponent shall:
 - a) construct the proposed left turn only access to the packing plant site from Bolong Road with appropriate physical barriers and signage;

- b) provide alternative access arrangements for the vehicles from the adjoining Shoalhaven Water site, and dedicate any land additional land required for these alternative access arrangements to Council as a road reserve; and
 - c) upgrade the access from the packing plant site to Railway Street; and
 - d) construct the proposed bridge over Abernethy Creek, to the satisfaction of Council and the RTA.
29. Prior to the commencement of construction on the proposed packing plant site, the Proponent shall prepare a Construction Traffic Management Plan for the construction works on site to the satisfaction of Council.

Upgrade Pedestrian Facilities

30. Within 12 months of this approval, the Proponent shall:
- a) provide a 1.2 metre pedestrian pathway along the southern boundary of Bolong Road between the Central Access Point (see map in Appendix 5) and the western boundary of Lot 62 DP 1078788;
 - b) provide a pedestrian refuge on Bolong Road between the factory and the:
 - CO₂ gas plant; and
 - the proposed packing plant; and
 - c) upgrade the street lighting along Bolong Road, in accordance with *AS/NZS 1158: Lighting for Roads and Public Spaces* to ensure that the pedestrian pathways, including the bridge over Abernethy Creek, and refuges are suitably lit after dark, to the satisfaction of the Council.

Note: The pedestrian pathway over Abernethy Creek must be designed and constructed in accordance DWE's Guidelines for Controlled Activities – Watercourse Crossings, dated February 2008.

Internal Roads & Parking

31. The Proponent shall:
- a) ensure that all internal roads and parking on site complies with *AS2890.1:2004 and AS2890.2:2002*, or their latest versions;
 - b) construct at least 60 new parking spaces on the factory site to the south of Bolong Road within 12 months of this approval; and
 - c) construct at least 30 new parking spaces at the proposed packing plant prior to the commencement of operations at the plant, to the satisfaction of the Director-General.
32. The Proponent shall ensure that vehicles associated with the project do not park or queue on the public road network at any time.

Night-time Heavy Vehicle Restrictions

33. The Proponent shall ensure that heavy vehicles travelling to and from the site between 8pm and 7am only use Bolong Road and Princes Highway.

Railway Crossings

34. Within 12 months of this approval, the Proponent shall undertake an assessment of the safety of the rail level crossing of Bolong Road, in consultation with the RTA, Council, NSW Rail Level Crossing Unit and the Independent Safety and Reliability Regulator, and to the satisfaction of the Director-General.
35. The Proponent shall implement all reasonable and feasible recommendations in the rail level crossing safety assessment to the satisfaction of the Director-General.

HAZARDS

Pre-construction Studies

36. The Proponent shall prepare and implement a Construction Safety Study in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.7 - Construction Safety Guidelines*, for the Project to the satisfaction of the Director-General.

Note: The commissioning portion of the Construction Safety Study may be submitted to the Department prior to the commencement of commissioning.

37. The Proponent shall not commence construction on site before the Construction Safety Study has been approved by the Director General.

Note: Preliminary construction works outside the scope of the hazard studies may be undertaken prior to the approval of the Construction Safety Study referred to above.

Pre-Commissioning Hazard Studies

38. The Proponent shall prepare and implement the following to the satisfaction of the Director-General:
- a Fire Safety Study prepared in accordance with the Department'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 Fire Safety Study shall also be prepared and implemented to the satisfaction of the NSW Fire Brigade;
 - a Hazard and Operability Study prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.8 - HAZOP Guidelines*, chaired by an independent qualified person approved by the Director-General, includes a program for the implementation of all recommendations made during the study; and if the Proponent intends to defer the implementation certain recommendations, then provide justification for the proposed deferral; and
 - a Final Hazards Analysis (FHA) prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis*.
 - a Transport of Hazardous Materials Plan, which details arrangements for the transport of hazardous materials including routes to be used by vehicles carrying hazardous materials, selected in accordance with the Department's draft '*Route Selection*' Guidelines;
 - an Emergency Plan prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1- Industry Emergency Planning Guidelines*; and
 - a Safety Management System prepared in accordance with the Department's *Hazardous Industry Planning Advisory Paper No.9 - Safety Management*, and specifies all safety-related procedures, responsibilities and policies, along with mechanisms for ensuring adherence to these procedures.
39. The Proponent shall not commence the commissioning of the project before these plans and systems have been approved by the Director-General.

WASTE

40. Except as expressly permitted by an EPL, the Proponent shall:
- not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing or disposal; and
 - ensure that all waste generated on the site is classified and managed in accordance with the DECC's Environmental Guidelines: *Waste Classification Guideline*.

Waste Management Plan

41. The Proponent shall prepare and implement a Waste Management Plan for the project to the satisfaction of the Director-General. This plan must:
- be submitted to the Director-General for approval within 3 months of this approval;
 - identify the various waste streams of the project;
 - describe what measures would be implemented to reuse, recycle or minimise the waste generated by the project; and
 - include a program to monitor the effectiveness of these measures.

LANDSCAPE

Lighting

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

Landscape and Vegetation Management

43. The Proponent shall prepare and implement a Vegetation Management Plan for the project to the satisfaction of the Director-General. This plan must:
- be prepared in consultation with DWE and Council and be submitted to the Director-General for approval within 6 months of this approval;
 - be prepared in accordance with *DWE's Guidelines for Controlled Activities – Vegetation Management Plans*; and
 - include:
 - a Landscape Plan for the project, which identifies screen plantings to minimise visual impacts;

- detailed plans and procedures to:
 - restore and maintain the waterways and riparian zones of Shoalhaven River, Bomaderry Creek, Abernethy's Creek and Broughton Creek on the site;
 - manage weeds in the vicinity of the riparian zones;
 - integrate works into the proposed landscaping for the rest of the site;
 - manage impacts on fauna; and
 - monitor the performance of the proposed restoration works.

SCHEDULE 4 ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:
 - a) be submitted to the Director-General for approval within 3 months of this approval;
 - b) identify the statutory requirements that apply to the project;
 - c) 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 during the course of the project;
 - respond to any non-compliance;
 - manage cumulative impacts; and
 - respond to emergencies; and
 - d) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the project.

ENVIRONMENTAL REPORTING

Incident Reporting

2. The Proponent shall notify the Director-General of any incidents 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 with a detailed written report on the incident, and any action that has subsequently been taken in relation to this incident.

Annual Reporting

3. The Proponent shall submit an Annual Report to the Director-General and other relevant agencies. This report must:
 - a) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
 - b) include a summary of monthly production levels over the year;
 - c) include a summary of the monitoring results obtained during the past year, and a comparison of these results against the relevant:
 - impact assessment criteria/limits;
 - monitoring results from previous years; and
 - predictions/assumptions in the EA;
 - d) identify any trends in the monitoring results over the life of the project;
 - e) identify any non-compliance during the previous year; and
 - f) describe what actions were, or are being, taken to ensure compliance.

INDEPENDENT ENVIRONMENTAL AUDIT

4. Within 12 months of the commencement of operations, 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 team of experts whose appointment has been endorsed by the Director-General;
 - b) be undertaken in consultation with **OEH**, DWE and Council;
 - c) include, in the initial audit, a Hazard Audit that has been conducted in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5 – Hazard Audit Guidelines*;
 - d) assess the environmental performance of the project and undertake any works necessary to determine whether it is complying with the relevant standards, performance measures, and statutory requirements;
 - e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
 - f) recommend measures or actions to improve the environmental performance of the project, and/or any strategy/plan/program required under this approval.

Note: Wherever possible, the timing of the Independent Environmental Audit and Independent Odour Audit should be co-ordinated to avoid duplication, and the expert conducting the Independent Odour Audit should be included in the broader audit team. In the initial years, the Independent Environmental Audit team should include experts in Odour, Noise, and Wastewater Irrigation.

5. Within 6 weeks of completing this 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 recommendations contained in the audit report.
6. Within 3 months of submitting an audit report to the Director-General, the Proponent shall review and if necessary revise the strategy/plans/programs and undertake additional mitigation measures as required under this approval to the satisfaction of the Director-General.

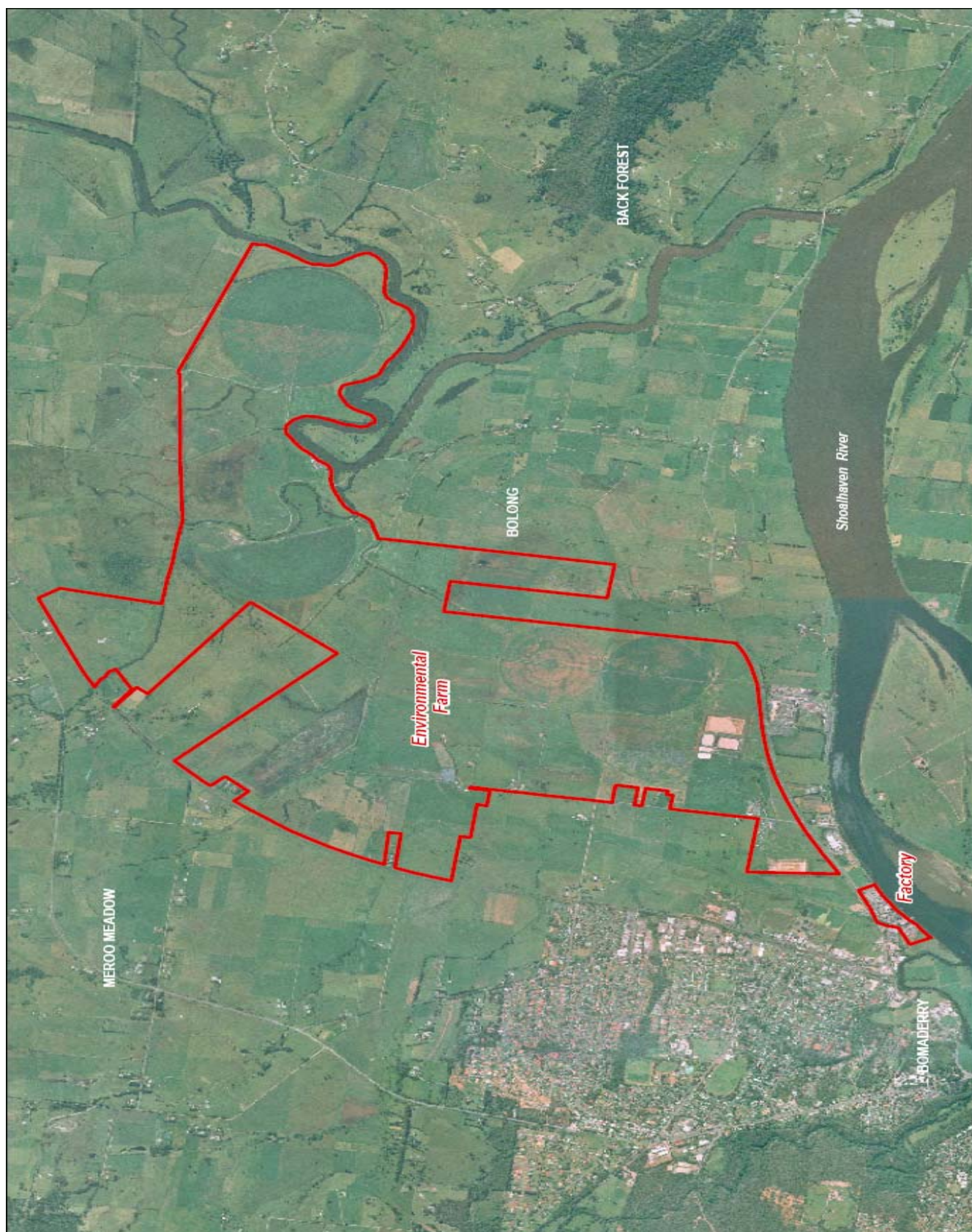
ACCESS TO INFORMATION

7. Within 3 months of the approval of any strategy/plan/program required under this approval (or any subsequent revision of these strategies/plans/programs), or the completion of the audits or annual reports required under this approval, the Proponent shall provide a copy of the relevant documents/data to:
 - a) the relevant agencies, and
 - b) any interested party upon request.

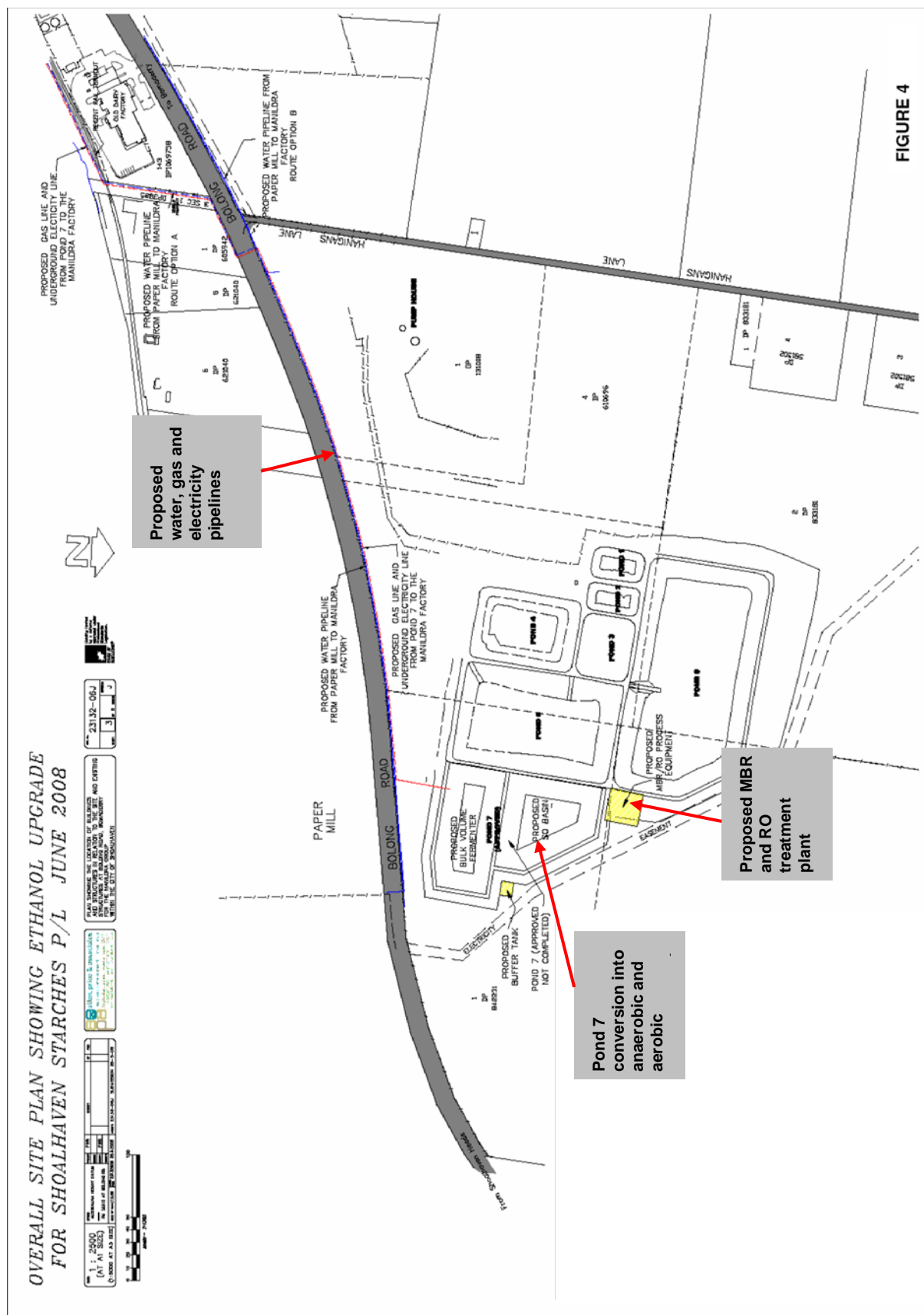
**APPENDIX 1
SCHEDULE OF LAND**

Lot	DP/FP
<i>Factory</i>	
1	838753
A	334511
B	334511
B	376494
62	1078788
201	1062668
1	385145
241	1130535
<i>Packing Plant</i>	
16	1121337
2	538289
<i>Wastewater Treatment Plant & Environmental Farm</i>	
4	610696
	131008
1	842231
2	842231
3	235705
1	235705
2	235705
Part 2	854837
4	1109510
22	811233
164	4469
2	854764
210	6131
211	6131
PT 212	6131
213	6131
214	6131
248	6131
2	955009
42	751268
63	751268
PT 2	854837
3	1109510
2	1109510
1	1109510
2	833181
<i>Overhead bridge – Bolong Road Reserve</i>	
2	538289
<i>Fire Services</i>	
241	1130535

APPENDIX 2 SITE PLANS



[illegible]



APPENDIX 3 ODOUR CONTROLS

Mandatory odour controls¹

- Install and commission a bioscrubber or biofilter (full details of its design, location, size, capacity and output must be included in the Odour Management Plan).
- Duct high priority dry distillers grain plant (DDG) odour sources to the bioscrubber/biofilter. The odorous sources include the DDG liquids line, the DDG solid line, the DDG (liquids) plant concentrate tank, finisher feed tank and feed holding tank (syrup). These have been identified as sources with very unpleasant odour. It is proposed to increase the volume of foul process air from sources within the DDG dryer building to the boiler.
- The bioscrubber/biofilter must have sufficient capacity to eliminate the odour collected at the plant's ultimate production limit and/or be capable of being readily upgraded to meet the requirements of any other control works that require implementation in the future, for example any of the additional odour control measures listed below.
- Install and commission a wastewater treatment plant at the Environmental Farm capable of processing the liquid waste streams from the factory at full approval capacity (full details of its design, location, capacity and output must be included in the Odour Management Plan).
- Install wet-legs on key odour sources that are not ducted to the bioscrubber at this stage. These sources include:
 - Farm tank (located near ethanol plant)
 - Ethanol plant Jet cooker retention tank "F7"
 - Glucose plant enzyme tank
 - DDG (solids) plant decanter feed tank
- Regularly clean all starch and gluten dryer ductwork to remove build up of solids that can become odorous
- Implement and maintain best practice standards for factory housekeeping in general and in particular the DDG plant grounds.
- ~~(Deleted)~~
- Decommission designated odour sources as follows:
 - Ethanol plant cooling towers
 - Kestner dryer exhaust at Starch plant
- ~~Install a ducting system in the DDG plant to collect odorous discharges from the sources listed in the GHD Report (October 2007) and direct them to at least 2 of the boilers. Existing connections from the non-condensables discharge fans and cyclone transfer fans must remain connected to the boilers.~~
- ~~Re-route the Palmer cooler discharge stack to at least 2 of the boilers.~~
- ~~Install a ducting system to collect all odorous discharges nominated in the GHD Report (October 2007) for the evaporator plant area and direct them to a new bio-filter via a venturi scrubber and cyclone separator.~~
- ~~Modify the DDG load-out area in the following manner:~~
 - ~~Extend the existing load-out awning to the south and fit each end of the shed with a motorised roller door configured such that at all times either the north or south door will be closed when a truck is loading DDG to prevent a wind tunnel effect and powder drifting out of the load-out area.~~
 - ~~Install the truck load-out chutes with Moduflex Bellow Feeders fitted with a dust extraction system to collect dust at the chute discharge and duct it to the bio-filter.~~

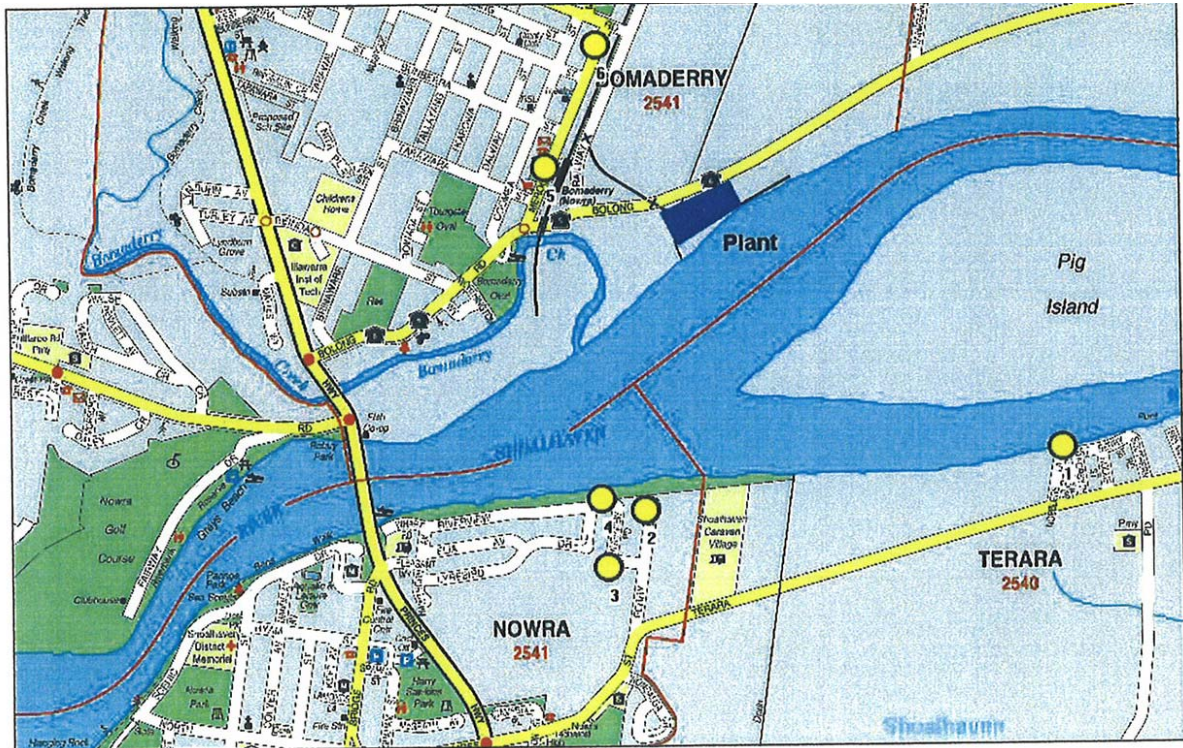
Additional odour controls²

- Duct medium priority odour sources to bioscrubber. These sources include:
 - Farm tank (located near ethanol plant)
 - Ethanol plant Jet cooker retention tank "F7"
 - Glucose plant enzyme tank
 - Ethanol plant decanter feed tank
 - Ethanol plant yeast propagators (tanks 1 to 5)
 - DDG (liquid) plant vent condenser drain
 - DDG (solids) plant decanters 1 and 4 and decanter feed
- Duct low priority odour sources to bioscrubber. These sources include:
 - Residual emission from the DDG dryer building
 - DDG (solids) plant ~~load out shed~~
 - Glucose plant drum vacuum receiver

- Distillery plant molecular sieve vacuum drum
- Ethanol plant jet cookers 1, 2 and 4
- Glucose plant cooker A&B flash tanks
- DDG (liquids) plant light phase recovery tank
- Glucose plant ion exchange effluent tank
- Ethanol plant starch factory rejects collection tank
- Duct individual starch and gluten dryer discharge points to common tall stack.
- Pelletise DDG product.

Notes: 1 Equivalent to the Stage 1 odour controls in the Odour Audit prepared by GHD, 2007;
2 Equivalent to the Stage 2 and 3 odour controls in the Odour Audit prepared by GHD, 2007

**APPENDIX 4
REFERENCE MAP FOR NOISE LIMITS**



Key

● Receiver Location

APPENDIX 5 TRANSPORT MAPS



