

# Project Approval

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

As delegate for the Minister for Planning and Infrastructure, I approve the project application referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

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.



Marcus Ray  
Acting Deputy Director-General

Sydney

11 January

2012

### SCHEDULE 1

|                                   |                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------|
| <b>Application No:</b>            | 08_0255                                                                     |
| <b>Proponent:</b>                 | Elf Farm Supplies Pty Ltd and Elf Mushrooms                                 |
| <b>Approval Authority:</b>        | Minister for Planning and Infrastructure                                    |
| <b>Substrate Plant Site Land:</b> | Lot 14 DP 1138749 and part Lot 13 DP 1138749<br>108 Mulgrave Road, Mulgrave |
| <b>Mushroom Farm Site Land:</b>   | Lot 138 DP 752037, 521<br>The Northern Road, Londonderry                    |
| <b>Project:</b>                   | Elf Substrate Plant and Elf Mushroom Farm Project                           |

## DEFINITIONS

|                                           |                                                                                                                                                                                                                                           |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| APZ                                       | Asset Protection Zone                                                                                                                                                                                                                     |
| BCA                                       | Building Code of Australia                                                                                                                                                                                                                |
| Construction                              | The demolition of buildings or works, carrying out of works, including bulk earthworks, and erection of buildings and other infrastructure covered by this approval                                                                       |
| Day                                       | The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays                                                                                                                                           |
| Department                                | Department of Planning and Infrastructure                                                                                                                                                                                                 |
| Director-General                          | Director-General of the Department (or delegate)                                                                                                                                                                                          |
| EA                                        | Environmental assessment titled Mushroom Industry Expansion in Western Sydney – Environmental Assessment dated December 2010 and the associated response to submissions, dated 17 March 2011 and 15 June 2011                             |
| ENM                                       | Excavated Natural Material                                                                                                                                                                                                                |
| EPA                                       | Environment Protection Authority of OEH                                                                                                                                                                                                   |
| EP&A Act                                  | Environmental Planning & Assessment Act 1979                                                                                                                                                                                              |
| EP&A Regulation                           | Environmental Planning & Assessment Regulation 2000                                                                                                                                                                                       |
| EPL                                       | Environment Protection Licence                                                                                                                                                                                                            |
| Evening                                   | The period from 6pm to 10pm                                                                                                                                                                                                               |
| Feasible                                  | Feasible relates to engineering considerations and what is practical to build                                                                                                                                                             |
| Heavy Vehicle                             | Any vehicle with a gross vehicle mass of 5 tonnes or more                                                                                                                                                                                 |
| Incident                                  | An incident causing or threatening material harm to the environment, and/or an exceedance of the limits or performance criteria in this approval                                                                                          |
| Land                                      | In general, the definition of land is consistent with the definition in the EP&A Act.                                                                                                                                                     |
| LGA                                       | Local government area                                                                                                                                                                                                                     |
| Material harm to the environment          | Harm to the environment is material if it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial                                                                                  |
| Minister                                  | Minister for Planning and Infrastructure                                                                                                                                                                                                  |
| Mitigation                                | Activities associated with reducing the impacts of the Project                                                                                                                                                                            |
| Mushroom Farm site                        | Lot 138 DP 752037 521 The Northern Road, Londonderry                                                                                                                                                                                      |
| Night                                     | The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays                                                                                                                                         |
| NOW                                       | NSW Office of Water                                                                                                                                                                                                                       |
| OEH                                       | Office of Environment and Heritage                                                                                                                                                                                                        |
| Operation (Mushroom farm site)            | Operation commences when the Substrate Plant increases production above 1,000 tonnes of substrate per week                                                                                                                                |
| Operation (Substrate Plant site)          | Operation commences upon receipt of substrate at the Mushroom Farm site                                                                                                                                                                   |
| Phase 1 substrate                         | Substrate that has been through the composting process only                                                                                                                                                                               |
| Phase 2 substrate                         | Phase 1 substrate that has been pasteurised at high temperature                                                                                                                                                                           |
| Phase 3 substrate                         | Phase 2 substrate that contains mushroom spawn                                                                                                                                                                                            |
| POEO Act                                  | Protection of the Environment Operations Act 1997                                                                                                                                                                                         |
| Project                                   | The development described in the EA                                                                                                                                                                                                       |
| Proponent                                 | Elf Farm Supplies Pty Ltd and Elf Mushrooms or their successor in title                                                                                                                                                                   |
| Reasonable                                | 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. |
| Rehabilitation                            | The treatment or management of land disturbed by the Project for the purpose of establishing a safe, stable and non-polluting environment                                                                                                 |
| RMS                                       | Roads and Maritime Services (formerly Roads and Traffic Authority)                                                                                                                                                                        |
| SRDAC                                     | Sydney Regional Development Advisory Committee                                                                                                                                                                                            |
| Stages 1 to 5 at the Mushroom Farm site   | The development stages shown on the plan in Appendix 4                                                                                                                                                                                    |
| Stages 1 to 3 at the Substrate Plant site | The development stages shown on the plan in Appendix 2                                                                                                                                                                                    |
| Statement of Commitments                  | The Proponent's Statement of Commitments in Appendix 1                                                                                                                                                                                    |
| Substrate                                 | Mushroom growing medium                                                                                                                                                                                                                   |
| Substrate Plant site                      | Lot 14 DP 1138749 and part Lot 13 DP 1138749, 108 Mulgrave Road, Mulgrave                                                                                                                                                                 |
| Vegetation Management Area                | The area shown on the Plan in Appendix 5                                                                                                                                                                                                  |
| VENM                                      | Virgin Excavated Natural Material                                                                                                                                                                                                         |

## **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;
  - (b) statement of commitments (see Appendix 1);
  - (c) site layout plans and drawings in the EA; 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.
5. This approval shall lapse if the Proponent does not physically commence the proposed development associated with this approval within 5 years of the date of this approval.

### **LIMITS ON APPROVAL**

#### **Substrate Plant Site**

6.
  - (1) The Proponent shall ensure that the Project on the Substrate Plant site does not:
    - a) produce more than 3,200 tonnes per week of phase 1 substrate; subject to (2) below and
    - b) dispatch more than 1,920 tonnes of phase 3 substrate per week.
  - (2) The proponent must not produce on the Substrate Plant site more than 1,000 tonnes of phase 1 substrate per week except in accordance with a staged approval granted by the Director-General in accordance with condition 7 Schedule 2 below.
7.
  - (1) The Proponent may apply to the Director-General for approval to increase production of substrate up to the rate of 1,600 tonnes of phase 1 substrate a week on the Substrate Plant site if –
    - a) the Odour Management Plan required under condition 6 of Schedule 4 has been prepared to the satisfaction of the Director-General and is being implemented; and
    - b) an independent odour audit has been prepared and submitted in accordance with condition 5 of Schedule 3.
  - (2) The Proponent may apply to the Director-General for approval to increase production of substrate up to the rate of 2,400 tonnes of phase 1 substrate a week on the Substrate Plant site if –
    - a) the site has been producing phase 1 substrate at a rate between 1,500 and 1,600 tonnes per week in accordance with an approval granted by the Director-General under this condition; and
    - b) an independent odour audit of the site operating in this range has been prepared and submitted in accordance with condition 5 of Schedule 3;
  - (3) The Proponent may apply to the Director-General for approval to increase production of substrate up to the rate of 3,200 tonnes of phase 1 substrate a week on the Substrate Plant site if –
    - a) the site has been producing phase 1 substrate at a rate between 2,300 and 2,400 tonnes per week in accordance with an approval granted by the Director-General under this condition; and
    - b) an independent odour audit of the site operating in this range has been prepared and submitted in accordance with condition 5 of Schedule 3.
  - (4) In deciding whether to approve an increase in substrate 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 Substrate Plant site as defined in section 129 of the POEO Act.

## **Mushroom Farm Site**

8. The Proponent shall ensure that the Mushroom Farm site does not produce more than 220 tonnes mushrooms per week.

## **EXISTING DEVELOPMENT CONSENTS AND RIGHTS**

9. The Proponent shall surrender all existing development consents in accordance with Clause 97 of the EP&A Regulation for the land referred to in Schedule 1, within 12 months of commencement of stage 1 operations, or as otherwise agreed by the Director-General.

*Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&A Act. Surrender of a consent or approval should not be understood as implying that works legally constructed under a valid consent or approval can no longer be legally maintained or used.*

## **TRANSITIONAL ARRANGEMENTS**

10. All existing environmental management plans that apply to the Substrate Plant site under DA No. 0623/02, DA No. 0571/06, DA No. 0921/06, DA No. 0701/07 and DA No. 0120/09 shall continue to be fully applied until replaced under this approval.

## **STRUCTURAL ADEQUACY**

11. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures 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**

12. 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.

## **OPERATION OF PLANT AND EQUIPMENT**

13. The Proponent shall ensure that all plant and equipment used for the Project is:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

## **UTILITIES**

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

## **SUBMISSION OF PLANS OR PROGRAMS**

15. With the written approval of the Director-General, the Proponent may:
- (a) submit any reports, plans, strategies or programs required by this approval on a progressive basis; and
  - (b) combine any reports, plans, strategies or programs required for the Substrate Plant site with any similar reports, plans, strategies or programs for the Mushroom Farm site.
  - (c) separate any reports, plans, strategies or programs required for the Substrate Plant site from any similar reports, plans, strategies or programs for the Mushroom Farm site.
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**SCHEDULE 3**  
**SPECIFIC ENVIRONMENTAL CONDITIONS – SUBSTRATE PLANT SITE**

**CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN**

1. The Proponent shall prepare and implement a Construction Environmental Management Plan for the Substrate Plant site to the satisfaction of the Director-General. This Plan must:
  - (a) be prepared in consultation with NOW and OEH;
  - (b) be submitted for approval prior to commencement of construction, and include:
    - a noise and vibration management plan, including a noise monitoring program that can be used to demonstrate compliance with the construction noise criteria in Condition 18 below;
    - an air quality management plan;
    - a soil and water management plan, including details of the erosion and sediment control measures to be used on site;
    - a flora and fauna management plan;
    - a heritage management plan;
    - a traffic management plan; and
    - a waste management plan.

**AIR QUALITY**

**Offensive Odours**

2. The Proponent shall not cause or permit the emission of offensive odours from the Substrate Plant site, as defined under Section 129 of the POEO Act.
3. The Proponent shall design, operate and maintain the bio-scrubber stacks at the Substrate Plant site in a manner that would achieve emissions compliance with the EPL for the Substrate Plant site. The Proponent must advise the Department of any variations to the EPL as approved by the EPA.

**Odour Management Plan**

4. The Proponent shall prepare and implement an Odour Management Plan for the Substrate Plant site to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with the OEH by a suitably independent, qualified and experienced expert whose appointment has been endorsed by the Director-General;
  - (b) be submitted to the Director-General for approval within 3 months of the date of this approval;
  - (c) describe in detail the measures that would be implemented on site to minimise the odour impacts of the Project, such as storing the stable bedding in the pre-wet shed extension building in Stages 2 and 3, and to ensure that these measures remain effective over time;
  - (d) identify triggers for remedial and contingency action; and
  - (e) include a program for monitoring the odour impacts of the Project.

**Odour Management Audit**

5. Prior to commencement of operation of each development stage at the Substrate Plant site, the Proponent shall commission and pay the full cost of an Independent Odour Audit on the site. This audit must:
  - (a) be prepared in consultation with OEH by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Director-General;
  - (b) assess the effectiveness of the odour controls on site in protecting receivers against offensive odours;
  - (c) review the Proponent's production data (that are relevant to the odour audit) and complaint records;
  - (d) review the effectiveness Odour Management Plan for the Project and advise whether any changes to the Plan is considered necessary;
  - (e) determine whether the Project is complying with condition 2 above; and, if necessary,
  - (f) recommend whether additional measures are required to minimise the odour emissions of the Project, such as enclosing the bale wetting area and water recycling pits and enclosing the chicken manure storage area.
6. Within 2 weeks of this audit being completed, or in a timeframe as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to OEH and the Director-General together with an action plan demonstrating how the findings of the audit are to be implemented.

**Dust**

7. The Proponent shall implement all reasonable and feasible measures to minimise dust generated at the Substrate Plant site.
8. During the construction and operation of the project, the Proponent shall ensure that:
  - (a) all trucks entering or leaving the Substrate Plant site with loads have their loads covered;

- (b) the trucks associated with the Project do not track dirt onto the public road network;
- (c) all areas are maintained in a condition to minimise the emission of wind-blown or traffic-generated dust,  
to the satisfaction of the Director-General.

## **GREENHOUSE GAS**

### **Energy Efficiency Plan**

9. The Proponent shall prepare and implement an Energy Efficiency Plan on the Substrate Plant site to the satisfaction of the Director-General. This plan must:
  - (a) be submitted to the Director-General for approval prior to the commencement of operations on the site;
  - (b) describe the measures that would be implemented to minimise energy use on the site;
  - (c) explore the possibility of using renewable energy use to generate power; and
  - (d) include a program to monitor the effectiveness of these measures, and a protocol to periodically review the plan.

## **SITE OPERATION**

### **Fire Management**

10. The Proponent shall:
  - (a) implement suitable measures to minimise the risk of fire on the Substrate Plant site;
  - (b) extinguish any fires on the Substrate Plant site promptly; and
  - (c) maintain adequate fire-fighting capacity on the Substrate Plant site.

### **Hazards**

11. The Proponent shall ensure that all dangerous goods and hazardous substances are stored and handled on the Substrate Plant site in accordance with the Dangerous Goods Code and AS 1940-2004: *The storage and handling of flammable and combustible liquids*.

### **Waste**

12. The Proponent must not cause, permit or allow any waste generated outside the Substrate Plant site to be received at the site for storage, treatment, processing, reprocessing or disposal of at the Substrate Plant site, except with the approval of the Director-General and as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

### **Bunding**

13. The Proponent shall store all chemicals, fuels and oils used on the Substrate Plant site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or DECCW's *Storage and handling liquids: Environmental Protection – Participant's Manual*.

## **SOIL and WATER**

### **Discharge Limits**

14. Except as may be expressly provided by an EPL for the Substrate Plant site, the Proponent must comply with Section 120 of the POEO Act.
15. The Proponent shall ensure that only VENM and/or ENM or material approved by the OEH is used as fill.
16. The Proponent shall ensure that filling of the manoeuvring area shall be undertaken in accordance with plans submitted with DA 0571/06.

### **Water Management Plan**

17. The Proponent shall prepare and implement a Water Management Plan for the Substrate Plant site to the satisfaction of the Director-General. The plan must be submitted to the Director-General for approval prior to the commencement of operation of Stage 1 and be prepared in consultation with OEH and NOW.

## **NOISE**

## Construction Noise Criteria

18. The Proponent shall ensure that the construction noise generated at the Substrate Plant site does not exceed the criteria in Table 1.

Table 1: Construction Noise impact assessment criteria dB(A)

| Receiver/Location                  | Day                          |
|------------------------------------|------------------------------|
|                                    | L <sub>Aeq</sub> (15 minute) |
| R1 – 46 Mulgrave Road, Mulgrave    | 52                           |
| R2 – Mulgrave Industrial area      | 65                           |
| R3 – 2 Railway Road, Mulgrave      | 52                           |
| R4 – 126 Mulgrave Road, Mulgrave   | 52                           |
| R5 – Chisholm Place, South Windsor | 51                           |

**Notes:**

- Noise generated by the Project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

## Operational Noise Criteria

19. The Proponent shall ensure that the operational noise generated by the Substrate Plant site does not exceed the criteria in Table 2.

Table 2: Operational Noise impact assessment criteria dB(A)

| Receiver/Location                  | Day /Evening                 | Night                        |
|------------------------------------|------------------------------|------------------------------|
|                                    | L <sub>Aeq</sub> (15 minute) | L <sub>Aeq</sub> (15 minute) |
| R1 – 46 Mulgrave Road, Mulgrave    | 42                           | 42                           |
| R2 – Mulgrave Industrial area      |                              |                              |
| R3 – 2 Railway Road, Mulgrave      |                              |                              |
| R4 – 126 Mulgrave Road             | 44                           | 39                           |
| R5 – Chisholm Place, South Windsor |                              |                              |

**Notes:**

- Noise generated by the Project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

## Hours of Work

20. The Proponent shall comply with the operating hours in Table 3 at the Substrate Plant site, unless otherwise agreed to in writing by the Director-General.

Table 3: Operating hours

| 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         |

## Additional Noise Mitigation Measures

21. The Proponent shall install the southern boundary noise wall adjacent to the bale storage shed on the Substrate Plant site prior to commencement of other stage 1 construction works.

## Noise Management Plan

22. The Proponent shall prepare and implement a Noise Management Plan for the Substrate Plant site in consultation with OEH to the satisfaction of the Director-General. The Plan must be submitted to the Director-General for approval prior to commencement of operations, and include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval.

## BIODIVERSITY

### Riparian Management Area

23. The Proponent shall establish a fenced, 35 metre wide riparian corridor along the length of South Creek within 12 months of commencement of operation of Stage 1. The Proponent shall consult with the

Hawkesbury-Nepean Catchment Management Authority on methods and species selection to ensure that best practise techniques are used at the site, to the satisfaction of the Director-General.

## **VISUAL AMENITY**

### **Lighting**

24. The Proponent shall ensure that all external lighting associated with the Substrate Plant site:
- (a) does not create a nuisance to surrounding properties or roadways; and
  - (b) complies with AS 4282(INT) 1995 – *Control of Obtrusive Effects of Outdoor Lighting*.

### **Signage**

25. The Proponent shall not install any advertising signs on the Substrate Plant site without the written approval of the Director-General.

## **TRANSPORT**

26. The Proponent shall ensure that:
- (a) car parking is constructed in accordance with the relevant requirements of the latest version of AS 2890.1; and
  - (b) vehicles associated with the Substrate Plant site do not park or queue on the public road network at any time.
-

**SCHEDULE 4**  
**SPECIFIC ENVIRONMENTAL CONDITIONS – MUSHROOM FARM SITE**

**CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN**

1. The Proponent shall prepare and implement a Construction Environmental Management Plan for the Mushroom Plant site to the satisfaction of the Director-General. This Plan must:
  - (a) be prepared in consultation with NOW and OEH;
  - (b) be submitted for approval prior to commencement of construction, and include:
    - a noise and vibration management plan, including a noise monitoring program that can be used to demonstrate compliance with the construction noise criteria in Condition 15 below;
    - an air quality management plan;
    - a soil and water management plan, including details of the erosion and sediment control measures to be used on site;
    - a flora and fauna management plan;
    - a heritage management plan, including the programs/procedures to be implemented in the event that previously unidentified relics are discovered (Condition 21)
    - a traffic management plan; and
    - a waste management plan.

**AIR QUALITY**

**Offensive Odours**

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

**Dust**

3. The Proponent shall implement all reasonable and feasible measures to minimise dust generated at the Mushroom Farm site.
4. During the construction and operation of the project, the Proponent shall ensure that:
  - (a) all trucks entering or leaving the Mushroom Farm site with loads have their loads covered;
  - (b) the trucks associated with the Project do not track dirt onto the public road network;
  - (c) all areas are maintained in a condition to minimise the emission of wind-blown or traffic-generated dust;to the satisfaction of the Director-General.

**GREENHOUSE GAS**

**Energy Efficiency Plan**

5. The Proponent shall prepare and implement an Energy Efficiency Plan on the Mushroom Farm site to the satisfaction of the Director-General. This plan must:
  - (a) be submitted to the Director-General for approval prior to the commencement of operations on the site;
  - (b) describe the measures that would be implemented to minimise energy use on the site;
  - (c) explore the possibility of using renewable energy use to generate power; and
  - (d) include a program to monitor the effectiveness of these measures, and a protocol to periodically review the plan.

**SITE OPERATION**

**Hazard and Risk**

6. The Proponent shall:
  - (a) provide and manage a 24 metre wide APZ between the buildings on the Mushroom Farm site and any bushfire hazard;
  - (b) implement suitable measures to minimise the risk of fire on the Mushroom Farm site;
  - (c) extinguish any fires on the Mushroom Farm site promptly;
  - (d) maintain adequate fire-fighting capacity on the Mushroom Farm site; and
  - (e) construct the proposed office building in compliance with section 7 (BAL 29) Australian Standard AS 3959-2009 *Construction of buildings in bush fire-prone areas* and section A3.7 Addendum Appendix 3 of *Planning for Bushfire Protection 2006*.
7. The Proponent shall ensure that all dangerous goods and hazardous substances are stored and handled on the Mushroom Farm site in accordance with the Dangerous Goods Code and AS 1940-2004: *The storage and handling of flammable and combustible liquids*.

## **Waste**

8. The Proponent must not cause, permit or allow any waste generated outside the Mushroom Farm site to be received at the site for storage, treatment, processing, reprocessing or disposal of at the site, except with the approval of the Director-General and as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*.

## **SOIL AND WATER**

### **Pollution of waters**

9. Except as may be expressly provided in an EPL for the Mushroom Farm site, the Proponent must comply with Section 120 of the POEO Act.

### **Bunding**

10. The Proponent shall store all chemicals, fuels and oils used on the Mushroom Farm site in appropriately banded areas, with impervious flooring and sufficient capacity to contain 110% of the largest container stored within the bund, unless double-skinned tanks are used. Any bunds shall be designed and installed in accordance with the requirements of all relevant Australian Standards, and/or DECCW's *Storage and handling liquids: Environmental Protection – Participant's Manual*.

### **Minimising Impacts of Chemicals**

11. The Proponent shall ensure that the use of chemicals (including pesticides and herbicides) on the Mushroom Farm site carried out in accordance with:
  - (a) *Agricultural and Veterinary Chemicals Act 1994*; and
  - (b) *Agricultural and Veterinary Chemicals (NSW) Regulation 2000*

### **Imported Soil**

12. The Proponent shall ensure that only VENM and/or ENM or material approved by the OEH is used as fill.

### **Water Management Plans**

13. The Proponent shall prepare and implement an operational Water Management Plan for the Project on the Mushroom Farm site in consultation with OEH, Penrith City Council and NOW to the satisfaction of the Director-General. The plan must:
  - (a) be submitted to the Director-General for approval prior to the commencement of operations;
  - (b) include:
    - a Stormwater Management Plan;
    - a Recycled Water Management Plan; and
    - an effluent irrigation plan.

## **NOISE**

### **Construction Noise Mitigation**

14. The Proponent shall install the northern environmental bund prior to commencement of any other construction works at the Mushroom Farm site.

Installation of the northern environmental bund must be completed within a period of not more than 3 months.

## Construction Noise Criteria

15. The Proponent shall ensure that the construction noise generated at the Mushroom Farm site does not exceed the criteria in Table 4.

Table 4: Construction noise criteria dB(A)

| Receiver/Location                               | Day<br>L <sub>Aeq</sub> (15 minute) |
|-------------------------------------------------|-------------------------------------|
| Receiver 1 – 493 The Northern Road, Londonderry | 49                                  |
| Receiver 2 – 509 The Northern Road, Londonderry | 54                                  |
| Receiver 3 – 1 Thomas Road, Londonderry         | 54                                  |
| Receiver 4 – 6-16 Timothy Road, Londonderry     | 45                                  |

**Notes:**

- Noise generated by the Project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.
- The construction noise criteria do not apply to any works associated with the installation of the northern environmental bund (Condition 14 above).

## Operational Noise Criteria

16. The Proponent shall ensure that the operational noise generated by the Mushroom Farm site does not exceed the criteria in Table 5.

Table 5: Noise impact assessment criteria dB(A)

| Receiver/Location                               | Shoulder period<br>L <sub>Aeq</sub> (15 minute) | Day<br>L <sub>Aeq</sub> (15 minute) | Evening/Night<br>L <sub>Aeq</sub> (15 minute) | Sleep disturbance<br>L <sub>A1</sub> (1 minute) |                             |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------|-----------------------------------------------|-------------------------------------------------|-----------------------------|
|                                                 |                                                 |                                     |                                               | Night                                           | Shoulder period (5am – 7am) |
| Receiver 1 – 493 The Northern Road, Londonderry | 44                                              | 35                                  | 35                                            | 45                                              | 48                          |
| Receiver 2 – 509 The Northern Road, Londonderry | 40                                              | 35                                  | 35                                            | 45                                              | 46                          |
| Receiver 3 – 1 Thomas Road, Londonderry         | 44                                              | 45                                  | 37                                            | 49                                              | 51                          |
| Receiver 4 – 6-16 Timothy Road, Londonderry     | 38                                              | 39                                  | 35                                            | 45                                              | 41                          |

**Notes:**

- Noise generated by the Project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

## Hours of Work

17. The Proponent shall comply with the operating hours on the Mushroom Farm site in Table 6, unless otherwise agreed with the Director-General.

Table 6: Operating Hours

| Activity     | Day                      | Hours       |
|--------------|--------------------------|-------------|
| Construction | Monday – Friday          | 7 am – 6 pm |
|              | Saturday                 | 8 am – 1 pm |
|              | Sunday & Public Holidays | Nil         |
| Operation    | All days                 | Any time    |

## Noise Management Plan

18. The Proponent shall prepare and implement a Noise Management Plan for the Mushroom Farm site in consultation with OEH to the satisfaction of the Director-General. The Plan must be submitted to the Director-General for approval prior to commencement of operations, and include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval.

## BIODIVERSITY

### Vegetation Management Area

19. The Proponent shall establish a Vegetation Management Area at the Mushroom Farm site (as shown in Appendix 5).

### Vegetation Management Plan

20. The Proponent shall prepare and implement a Plan for the Vegetation Management Area to the satisfaction of the Director-General. This plan must be prepared in consultation with OEH by a suitably qualified and experienced expert/s whose appointment has been approved by the Director-General. The plan must:
- (a) be submitted to the Director-General for approval prior to the commencement of construction on the Mushroom Farm site;
  - (b) identify all vegetation that is present within the vegetation management area (as shown in Appendix 5);
  - (c) include details of the mechanism that will be used to ensure that the vegetation within the area is protected in perpetuity;
  - (d) describe the management measures that will be implemented to maintain and enhance the vegetation within the area over time, including fencing of *Dillwynia tenuifolia* and *Persoonia nutans*;
  - (e) include a detailed weed condition map as a baseline from which site rehabilitation/management can be measured.

*Note : all vegetation rehabilitation work is to be supervised by an appropriately qualified and experienced person with minimum qualifications of TAFE Certificate III in Bush Regeneration or Conservation and Land Management - Natural Area Restoration and 4 years bush regeneration experience;*

## HERITAGE

21. The Proponent shall prepare and implement a Heritage 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 qualified and experienced expert;
  - (b) be submitted to the Director-General for approval prior to commencement of construction;
  - (c) include programs/procedures for:
    - managing the discovery of previously unidentified heritage relics including halting of works in the vicinity, notification of OEH and the Department;
    - managing the discovery of human remains including the halting of works in the vicinity, notification of the NSW Police, the Department, the OEH and Aboriginal stakeholders and not recommencing any works in the area unless authorised to do so by the Department and/or the NSW Police (whichever is relevant); and
    - heritage inductions for construction personnel (including procedures for keeping records of inductions).

## VISUAL AMENITY

22. Prior to commencement of construction works, the Proponent shall prepare and implement a Landscape Management Plan for the Project to the satisfaction of the Director-General. This Plan must:
- (a) be prepared in consultation with Penrith City Council
  - (b) Submitted to the Director-General prior to commencement of construction works;
  - (c) where practicable, provide for the early planting of advanced plants along the northern, and southern boundaries to minimise the visual impacts of the Project; and
  - (d) use predominantly endemic species,
  - (e) where practicable, provide for the early planting of advanced plants along the northern, and southern boundaries to minimise the visual impacts of the Project; and
  - (f) provide for the maintenance of landscaping on site.
23. Prior to the commencement of construction on the Mushroom Farm site the Proponent shall offer and implement (if the offer is accepted) landscaping treatments to the residences in Table 7 below. These measures must be reasonable and feasible, and directed toward minimising the visibility of the operations from the residences on the land

Table 7 – residences at which landscape treatment will be offered

|             | Residences                         |
|-------------|------------------------------------|
| Residence 1 | 493 The Northern Road, Londonderry |
| Residence 2 | 509 The Northern Road, Londonderry |
| Residence 3 | 1 Thomas Road, Londonderry         |

If within 3 months of receiving the offer, the Proponent and the owner can not agree on the landscaping treatment, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

24. Prior to installing any boundary fencing on Mushroom Farm site, the Proponent shall submit detailed plans of this fencing to the Director-General for approval. These plans must be prepared in consultation with Penrith City Council. Following approval, the Proponent must ensure that the fencing is installed in accordance with the approved plans.

#### Lighting

25. The Proponent shall ensure that all external lighting associated with the Project on the Mushroom Farm site:
- (a) does not create a nuisance to surrounding properties or roadways; and
  - (b) complies with AS 4282(INT) 1995 – *Control of Obtrusive Effects of Outdoor Lighting*.

#### Signage

26. The Proponent shall not install any advertising signs on the Mushroom Farm site without the written approval of the Director-General.

#### ACCESS ROAD WORKS

27. Prior to the commencement the operation of stage 1, unless otherwise agreed by the Director-General, the Proponent shall design and construct the Mushroom Farm site access as a "Type CHR" Rural Intersection, in accordance with the RTA's *Road Design Guide* and relevant Austroads guidelines, to the satisfaction of the RMS.

In finalising the design of the site access, the Proponent shall:

- (a) ensure that the swept path of the largest vehicle entering/exiting the site and manoeuvrability through the site is in accordance with the relevant Australian Standard and to Penrith City Council's satisfaction; and
- (b) sign a *Works Authorisation Deed* with the RMS.

#### TRANSPORT

##### Car Parking

28. The Proponent engage a suitably qualified and experienced expert to prepare a car parking study to re-evaluate parking requirements for stages 2 to 5 of the Project on the Mushroom Farm site. The study shall:
- (a) be submitted to the satisfaction of the Director-General prior to commencement of construction works for stage; and
  - (b) provide recommendations as to whether the car parking is sufficient.
29. The Proponent shall ensure that:
- (a) car parking is constructed in accordance with the relevant requirements of the latest version of AS 2890.1;
  - (b) vehicles associated with the Project do not park or queue on the public road network at any time; and
  - (c) all vehicles enter and leave the site in a forward direction; and
-

## **SCHEDULE 5**

### **ENVIRONMENTAL MANAGEMENT and REPORTING**

#### **ENVIRONMENTAL MANAGEMENT**

##### **Environmental Management Strategy**

1. The Proponent shall prepare and implement an Environmental Management Strategy for the Project to the satisfaction of the Director-General. The Strategy must:
  - a) be submitted to the Director-General for approval prior to the commencement of operation;
  - b) provide the strategic framework for environmental management of the Project;
  - c) identify the statutory approvals that apply to the Project;
  - d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Project;
  - e) 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; and
    - respond to emergencies;
  - f) include:
    - copies of the various strategies, plans and programs that are required under the conditions of this approval once they have been approved; and
    - a clear plan depicting all the monitoring currently being carried out within the Project area.

##### **Management Plan Requirements**

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
  - a) detailed baseline data;
  - b) a description of:
    - the relevant statutory requirements (including any relevant approval, licence or lease conditions);
    - any relevant limits or performance measures/criteria; and
    - the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Project or any management measures;
  - c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
  - d) a program to monitor and report on the:
    - impacts and environmental performance of the Project;
    - effectiveness of any management measures (see c above);
  - e) a contingency plan to manage any unpredicted impacts and their consequences;
  - f) a program to investigate and implement ways to improve the environmental performance of the Project over time;
  - g) a protocol for managing and reporting any:
    - incidents;
    - complaints;
    - non-compliances with statutory requirements; and
    - exceedances of the relevant limits and/or performance measures / criteria; and
  - h) a protocol for periodic review of the plan.

##### **Review**

3. One year after the commencement of operations, and every three years thereafter, the Proponent shall review the environmental performance of the Project to the satisfaction of the Director-General. This review must:
  - a) describe the operations that were carried out in the past year;
  - b) analyse the monitoring results and complaints records of the Project over the past year, which includes a comparison of these results against the
    - relevant statutory requirements, limits or performance measures/criteria;
    - monitoring results of previous years; and
    - relevant predictions in the EA;
  - c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
  - d) identify any trends in the monitoring data over the life of the Project; and
  - e) describe what measure will be implemented over the next year to improve the environmental performance of the Project.

| <b>Issue</b>   | <b>Assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Recommendation</b>                                                                                                                                                    |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | emissions.                                                                                                                                                               |
| <b>Hazards</b> | <ul style="list-style-type: none"> <li>▪ The Project is located on bushfire prone land; and</li> <li>▪ Proposed management measures, including a Bushfire Emergency Plan, a 10m wide defendable space to the west, north and south of each building, a 24m asset protection zone to the north, east and western aspects of the buildings, as well as ember protection to the spent substrate store in the form of drencher sprays, would reduce risk from bushfire to acceptable levels.</li> </ul> | <ul style="list-style-type: none"> <li>• Recommended conditions require the Proponent to comply with the EA and <i>Planning for Bushfire Protection 2006</i>.</li> </ul> |

The Department has assessed the Project, in accordance with the requirements of Clause 8B of the *Environmental Planning and Assessment Regulation 2000*, and considers that all potential impacts of the Project can be suitably managed to ensure an acceptable level of environmental performance.



## **Revision of Plans & Programs**

4. Within 3 months of the submission of an:
  - a) incident report under condition 6 of schedule 6; and
  - b) three yearly review under condition 4 of schedule 6,the Proponent shall review, and if necessary revise the plans and programs required under this approval to the satisfaction of the Director-General.

*Note: This is to ensure the plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.*

## **REPORTING**

### **Incident**

5. The Proponent shall notify the Director-General and any other relevant agencies of any incident 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.
-

**APPENDIX 1**  
**PROPOSERS STATEMENT OF COMMITMENTS**

## ATTACHMENT 5 REVISED STATEMENT OF COMMITMENTS

### 1. Mushroom Farm - Construction

| Outcome                                       | Commitment |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timing                                                                  |
|-----------------------------------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Environmental management                      | 1.1        | Prepare and subsequently implement an environmental management plan for construction, consistent with this environmental assessment and conditions of approval.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Prior to issue of construction certificate                              |
|                                               | 1.2        | Identify and clearly mark vegetation to be retained.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Prior to construction                                                   |
|                                               | 1.3        | Instruct all construction personnel of the requirements for environmental management on the site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Prior to and during construction                                        |
| Minimise soil erosion and sediment deposition | 1.4        | Implement erosion and sediment controls consistent with the erosion and sediment control plan and keep in place with adequate maintenance until work is complete or they are no longer required.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Prior to commencement of earthworks and thereafter as long as necessary |
|                                               | 1.5        | Progressively rehabilitate areas disturbed during construction with grass or landscaping as designed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | During construction                                                     |
| Control nuisance dust                         | 1.6        | Implement dust mitigation measures as follows: <ul style="list-style-type: none"> <li>• restrict vehicles to a defined route within the site;</li> <li>• limit vehicle speeds on unsealed surfaces;</li> <li>• maintain haul routes for fill trucks in a damp state;</li> <li>• apply temporary stabilisation to any exposed surface that is unlikely to be further disturbed for a period of one month or longer; and</li> <li>• rehabilitate finished surfaces as soon as possible to limit wind-generated dust.</li> </ul>                                                                                                                                                                                                                                                                                                                         | During construction                                                     |
| Minimise construction noise                   | 1.7        | Implement construction noise mitigation measures as follows. <ul style="list-style-type: none"> <li>• Construct the northern acoustic mound as early as practicable in the construction program;</li> <li>• adopt construction practices recommended by DECCW for best management and best available technology economically achievable;</li> <li>• select construction plant and equipment having regard to controlling noise emissions, including reversing alarm noise;</li> <li>• reduce operating speeds of equipment where practical and switch off idle plant when not in active use;</li> <li>• arrange vehicular access to work areas to allow for forward vehicle travel, minimising reversing or manoeuvring wherever possible;</li> <li>• provide site induction and personnel/contractor training in correct use of plant and</li> </ul> | During construction                                                     |

| Outcome                     | Commitment |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timing                                                           |
|-----------------------------|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
|                             |            | <p>equipment to minimise noise;</p> <ul style="list-style-type: none"> <li>• develop and implement a program to inspect and maintain mobile plant to ensure noise performance criteria are met;</li> <li>• comply with the standard construction hours of working;</li> <li>• establish a noise complaints procedure with contact phone number and logging and response protocols; and</li> <li>• review the use of mobile plant reversing alarms including altering work practices and/or replacing with less intrusive devices where practicable.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                  |
| Manage construction traffic | 1.8        | Prepare in consultation with the RTA and implement a traffic management plan for construction, including signs warning traffic on The Northern Road of the heavy vehicle entry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Prior to commencement of construction work.                      |
|                             | 1.9        | Construct the intersection of the site access road and The Northern Road to Type AU in accordance with the RTA <i>Road Design Guide</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Prior to issue of occupation certificate                         |
| Minimise visual impact      | 1.10       | <p>Implement the following measures to reduce visual impact:</p> <ul style="list-style-type: none"> <li>• select external building finishes and colours to reduce glare and minimise visual obtrusiveness.</li> <li>• construct and landscape the mound along The Northern Road frontage and the northern site boundary as soon as possible after site activities commence;</li> <li>• plant a mixture of semi-advanced trees, shrubs and groundcover on the mound to achieve early coverage and height enhancement;</li> <li>• maintain and nurture the landscaping on the mound with appropriate mulching, frequent watering at first and frequent inspections to correct any wind or animal damage and to replace failed plantings;</li> <li>• plant additional trees in the south eastern corner of the site to further restrict diagonal views from northbound vehicles on The Northern Road;</li> <li>• plant additional trees in the southern section of the site to further restrict views from the adjoining residence to the south towards the development area;</li> <li>• during each stage of the development, when the frame of the main building or building extension has been erected, undertake a visual assessment from The Northern Road and with the agreement of owners, from adjoining properties. Where it is practicable to reduce visual impact:</li> </ul> | During construction and prior to issue of occupation certificate |

| Outcome                   | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Timing                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
|                           | <ul style="list-style-type: none"> <li>plant additional screening vegetation in strategic locations on the property, such as in the southern area, to further reduce visibility from The Northern Road and the residence to the south;</li> <li>offer to residents on properties to the north to plant screening vegetation on their properties at locations agreed with them and if the offer is accepted, undertake the plantings for the residents to maintain;</li> <li>during construction, minimise the area of physical disturbance to the land at any one time and revegetate any disturbed areas visible from beyond the site that are not required as hardstand.</li> </ul>                                                                                                                                                                                                                                                                         |                                  |
| Protect cultural heritage | 1.11 Implement the following protocols as required: <ul style="list-style-type: none"> <li>should any Aboriginal object be identified during construction, work should cease and notification given to the NSW OEH, a qualified archaeologist and Aboriginal representatives of the Deerubbin LALC. The archaeologist is to develop an appropriate mitigation or management strategy in consultation with OEH and DLALC and the EMP is to be amended accordingly;</li> <li>should skeletal remains be discovered, cease work at the location and report the find to the police. If the remains prove to be of Aboriginal origin advise DECCW, a qualified archaeologist and Aboriginal representatives of the Deerubbin LALC.</li> </ul>                                                                                                                                                                                                                      | During construction              |
| Protect flora and fauna   | 1.12 Implement flora and fauna protection measures as follows: <ul style="list-style-type: none"> <li>avoid removing remnant trees wherever possible;</li> <li>install temporary fencing to protect woodland remnants when undertaking construction work in the immediate vicinity that does not require disturbance of the woodland;</li> <li>collect stormwater from the development in dams rather than directing it into woodland areas;</li> <li>plant local native species from the Castlereagh Woodlands along The Northern Road frontage and elsewhere for landscaping to enhance the remnant of this community. A suitable species list has been provided.</li> <li>manage the rural property during construction to maintain pasture and suppress weeds;</li> <li>separately fence the groupings of threatened species located in the asset protection zone west of the spent substrate store and avoid disturbance to the fenced areas.</li> </ul> | Prior to and during construction |

## 2. Mushroom Farm - Operation

| Outcome                    |     | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Timing                                                  |
|----------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Environmental management   | 2.1 | Prepare and subsequently implement an environmental management plan for operation consistent with this EA and conditions of approval.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Prior to issue of occupation certificate for each stage |
| Minimise operational noise | 2.2 | Operate the farm in a manner to maintain noise levels at nearby sensitive receptors within DECCW criteria.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | During operation                                        |
|                            | 2.3 | <p>Implement operational noise mitigation measures as follows:</p> <ul style="list-style-type: none"> <li>• undertake detailed design of buildings and structures to meet specified noise attenuation criteria as indicated in Table 10 of the mushroom farm noise assessment report;</li> <li>• select mechanical plant and equipment to meet sound power levels and/or acoustic performance indicated in Table 10 of the noise assessment report (see below);</li> <li>• construct a noise mound along the northern boundary with finished level at least 2.5 metres above the floor level of the main building;</li> <li>• construct a noise mound along the eastern boundary with finished level at least 2.5 metres above existing ground level;</li> <li>• modify moving floor substrate trucks to incorporate acoustic enclosures for trailer motors and residential grade mufflers to achieve a minimum 3 dB(A) noise reduction and result in a sound power level in the order of Lw100 dB(A);</li> <li>• maintain truck airbrake release discharge noise levels to Lw115 dB(A) or less;</li> <li>• require trucks to operate on the access roads at speeds not exceeding 20 kph;</li> <li>• fit "quacker" reversing alarms to mobile plant where practicable; and</li> <li>• incorporate the noise management protocols within the environmental management plan for the site.</li> </ul> | During operation                                        |

| Outcome                              |     | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Timing           |
|--------------------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| Avoid offensive odour                | 2.4 | Implement odour controls as follows: <ul style="list-style-type: none"> <li>• keep spent substrate retained on the site for refining under cover to prevent further wetting during rainfall;</li> <li>• turn and blend spent substrate from time to time to assist aeration;</li> <li>• remove collected solids from pit filters each week using a telescopic loader; and</li> <li>• manage and maintain the wash down water recycling system to prevent odour generation.</li> <li>• include in the environmental management plan a procedure for recording and responding to any complaints that may be received pertaining to operation of the facility</li> </ul>                                                                                                                                                                                                                                                                        | During operation |
| Effectively manage operational water | 2.5 | Manage the operation to prevent discharge of process water from the site and to maximise use of collected and recycled water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | During operation |
|                                      | 2.6 | Adequately maintain the sewage treatment plant to ensure satisfactory operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | During operation |
|                                      | 2.7 | Adequately maintain the wash down water recycling system to ensure satisfactory operation.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | During operation |
|                                      | 2.8 | Maintain 100% ground cover over parts of the site not subject to building work or operations.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | During operation |
|                                      | 2.9 | Maintain perimeter mounds so that rainfall runoff will continue to flow to natural drainage without ponding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | During operation |
| Protect flora and fauna              | 3.0 | Continue to suppress weeds on the development site and protect remaining trees.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | During operation |
| Bushfire Protection                  | 3.1 | Implement the following measures to minimise bushfire risk: <ul style="list-style-type: none"> <li>• establish and maintain a defendable space of 10 metres to the west, north and south of each building. The defendable space is to be a clear area with unimpeded access for fire fighting;</li> <li>• on sides of the spent substrate store where there is no concrete apron, include a three-metre hardstand area as part of the defendable space;</li> <li>• provide a static water supply (water tank, not dependent upon electricity for pumping) to supplement the reticulated supply;</li> <li>• use non-combustible external cladding to the main building;</li> <li>• provide ember protection to the spent substrate store in the form of drencher sprays to keep the contents damp during a bushfire event;</li> <li>• design the structures to have concrete floors, steel roof cladding, non-combustible flashing</li> </ul> | During operation |

| Outcome             |     | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Timing           |
|---------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
|                     |     | <p>at roof intersections with no gaps and non-combustible gutters and downpipes;</p> <ul style="list-style-type: none"> <li>• fit steel mesh screens to all windows and personnel doors on the northern and western elevations;</li> <li>• maintain an asset protection zone for 24 metres to the north, east and western aspects of the buildings with shrub layer managed so as not to exceed five tonnes per hectare. Existing trees do not require removal, but branches should not come within five metres;</li> <li>• provide a reticulated water supply compliant with relevant standards capable of providing emergency supply for fire fighting;</li> <li>• provide a rubber fire hose of minimum diameter 18 millimetres capable of reaching all elevations of all buildings;</li> <li>• maintain vehicle access to the site in compliance with the standard and fire brigade access to the northern and western asset protection zones;</li> <li>• develop and adopt an emergency bushfire plan.</li> </ul> |                  |
| Monitor performance | 3.2 | Continue to monitor operations as specified in the environment management plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | During operation |

### 3. Substrate Plant - Construction

| Outcome                                       |     | Commitment                                                                                                                                                                                       | Timing                                                                  |
|-----------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| Environmental management                      | 3.1 | Prepare and subsequently implement an environmental management plan for construction, or modify the existing EMP, consistent with this EA and conditions of approval.                            | Prior to issue of construction certificate                              |
|                                               | 3.2 | Instruct all construction personnel of the requirements for environmental management on the site.                                                                                                | Prior to and during construction                                        |
| Minimise soil erosion and sediment deposition | 3.3 | Implement erosion and sediment controls consistent with the erosion and sediment control plan and keep in place with adequate maintenance until work is complete or they are no longer required. | Prior to commencement of earthworks and thereafter as long as necessary |
|                                               | 3.4 | Progressively rehabilitate areas disturbed during construction with landscaping or hardstand as designed                                                                                         | During construction                                                     |

| Outcome                     |     | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Timing              |
|-----------------------------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Control nuisance dust       | 3.5 | <p>Implement the following dust mitigation measures:</p> <ul style="list-style-type: none"> <li>• limit vehicle speeds on unsealed surfaces;</li> <li>• maintain unsealed haul routes for fill trucks in a damp state; and</li> <li>• rehabilitate finished surfaces as soon as possible either with landscaping or hardstand, according to intended use.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | During construction |
| Minimise construction noise | 3.6 | <p>Implement construction noise mitigation measures as follows:</p> <ul style="list-style-type: none"> <li>• avoid operating the bulldozer and compactor simultaneously during filling operations;</li> <li>• when concrete pours are taking place, locate concrete trucks and pumps in a manner that will maximise screening to residential properties to the south and west;</li> <li>• construct the southern boundary wall adjacent to the eastern bale wetting area as early as practicable in the construction program;</li> <li>• adopt construction practices recommended by DECCW for best management and best available technology economically achievable;</li> <li>• select construction plant and equipment having regard to controlling noise emissions, including reversing alarm noise;</li> <li>• where practicable schedule the noisiest activities to occur during parts of the day when ambient noise levels are higher;</li> <li>• undertake audits at receiver locations to monitor noise from site construction;</li> <li>• establish a noise complaints procedure with contact phone number and logging and response protocols;</li> <li>• undertake construction activities in accordance with AS 2436:1981, <i>Guide to Noise Control on Construction, Maintenance and Demolition Sites</i>, with all equipment demonstrating compliance with the noise levels recommended in the standard.</li> </ul> | During construction |
| Manage construction traffic | 3.7 | Maintain the intersection of the site access road and Mulgrave Road in a safe condition suitable for heavy construction traffic including vehicles delivering fill.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | During construction |
| Minimise visual impact      | 3.8 | <p>Implement measures to reduce visual impact of the development as follows:</p> <ul style="list-style-type: none"> <li>• commence screen planting around the periphery of the extended platform area as early as possible during the project;</li> <li>• during construction, minimise the area of</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | During construction |

| Outcome                   |      | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Timing              |
|---------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|                           |      | <p>physical disturbance to the land at any one time and revegetate any disturbed areas visible from beyond the site that are not required as hardstand;</p> <ul style="list-style-type: none"> <li>mulch fill batters as soon as possible after completion and maintain them to achieve total vegetation cover;</li> <li>continue to maintain previous landscaping and screen planting on the site to maximise screening of the plant;</li> <li>incorporate building materials of the same colour and texture as used in the existing plant, which minimise glare and visual obtrusiveness.</li> </ul>                                                                                                                               |                     |
| Protect cultural heritage | 3.9  | <p>Implement the following protocols as required:</p> <ul style="list-style-type: none"> <li>should any Aboriginal object be identified during construction, work should cease and notification given to DECCW, a qualified archaeologist and Aboriginal representatives of the Deerubbin LALC. The archaeologist is to develop an appropriate mitigation or management strategy in consultation with OEH and DLALC and the EMP is to be amended accordingly;</li> <li>should skeletal remains be discovered, cease work at the location and report the find to the police. If the remains prove to be of Aboriginal origin advise DECCW, a qualified archaeologist and Aboriginal representatives of the Deerubbin LALC.</li> </ul> | During construction |
| Protect flora and fauna   | 3.10 | Suppress weeds on the construction site and protect existing landscape planting that is to be retained.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | During construction |

#### 4. Substrate Plant - Operation

| Outcome                  |     | Commitment                                                                                                                                                                                                                      | Timing                                                  |
|--------------------------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Environmental management | 4.1 | Prepare and subsequently implement an environmental management plan for operation, or modify the existing EMP, consistent with this EA and conditions of approval.                                                              | Prior to issue of occupation certificate for each stage |
| Production limit         | 4.2 | <p>Maintain average weekly production of Phase 1 substrate within upper limits as follows:</p> <ul style="list-style-type: none"> <li>Stage 1 1600 tonnes</li> <li>Stage 2 2400 tonnes</li> <li>Stage 3 3,200 tonnes</li> </ul> | During operation                                        |
| Minimise operational     | 4.3 | Operate the plant in a manner to maintain noise levels at nearby sensitive receptors within                                                                                                                                     | During operation                                        |

| Outcome               |     | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Timing           |
|-----------------------|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| noise                 |     | DECCW criteria.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |
|                       | 4.4 | <p>Implement the following noise mitigation measures:</p> <ul style="list-style-type: none"> <li>• undertake detailed design of buildings and structures to meet requirements specified in section 7.4 of the substrate plant noise assessment report, as follows: <ul style="list-style-type: none"> <li>– Building walls for the bale storage and pre-wet sheds shall consist of concrete to a height of 2 metres above FFL followed by galvanised steel frame and galvanised wall/roof sheeting nominally 0.6 mm BMT and a minimum of Rw22;</li> <li>– Internal walls and roof of tunnels within phase 2/3 building constructed of concrete blockwork and/or hebel panels/blocks;</li> <li>– Building wall cladding (Phase 2/3 building) consisting of insulated colorbond sandwich panels consistent with existing Phase 2/3 building proving a nominal installed noise reduction in the order of 23 dB(A) (Rw28 or greater).</li> <li>– Building roof cladding consisting of sheet metal (min 0.42 BMT) over fibreglass building blanket and medium duty thermofoil or similar and insulated colorbond sandwich panel (ceiling) consistent with existing Phase 2/3 tunnel building providing a nominal installed noise reduction in the order of 28 dB(A) (Rw34 or greater).</li> <li>– Final details of building designs subject to review prior to final specification</li> </ul> </li> <li>• select mechanical plant and equipment to meet sound power levels and/or acoustic performance in Table 10 of the acoustic assessment report for the substrate plant (see below);</li> <li>• require trucks to operate on the access roads at speeds not exceeding 20 kph;</li> <li>• fit "quacker" reversing alarms to mobile plant where practicable; and</li> <li>• incorporate noise management protocols within the environmental management plan for the site.</li> </ul> | During operation |
| Avoid offensive odour | 4.5 | Operate the plant in a manner to maintain odour emissions within the limit specified in the DECCW licence.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | During operation |
|                       | 4.6 | <p>Continue to implement existing odour controls at the plant:</p> <ul style="list-style-type: none"> <li>• under-cover storage for raw materials to</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | During operation |

| Outcome                              |      | Commitment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Timing                            |
|--------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
|                                      |      | <p>keep them dry;</p> <ul style="list-style-type: none"> <li>enclosed processing areas for all potentially odour-generating activities;</li> <li>air-under system in the pre-wet building and in all Phase 1 tunnels to improve aeration of composting material;</li> <li>automatic control system for fans to maintain optimum air supply and extraction;</li> <li>an enclosed vehicle passageway to enable indoor transfer of partly processed material from the pre-wet building to Phase 1 tunnels;</li> <li>enclosed conveyor transport for tunnel loading, dispatch loading and transfer to Phase 2/3 tunnels;</li> <li>a bioscrubber to remove odorous compounds from exhaust air prior to release to the atmosphere;</li> <li>a chimney to discharge exhaust air 40 metres above ground to aid dispersion; and</li> <li>a monitoring system to detect any faults or operational anomalies and immediately send an alarm to the Duty Manager at any time of day.</li> </ul> |                                   |
|                                      | 4.7  | <p>Implement the following additional odour control measures:</p> <ul style="list-style-type: none"> <li>add a second bioscrubber dedicated for the pre-wet processing area to reduce load on the existing bioscrubber and allow better control of negative pressure in the pre-wet building, reducing the likelihood of fugitive emissions;</li> <li>provide an enclosed conveyor from the pre-wet building to the Phase 1 tunnel building replacing the vehicle passageway to speed up the material transfer process and reduce the potential for fugitive emissions from this operation;</li> <li>extract air from the raw materials storage shed, reducing the potential for fugitive emissions from poultry manure.</li> </ul>                                                                                                                                                                                                                                                |                                   |
| Effectively manage operational water | 4.8  | Manage the operation to prevent discharge of process water from the site and to maximise use of collected and recycled water.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | During operation                  |
| Improve runoff water quality         | 4.9  | Implement and maintain the stormwater modifications recommended in the stormwater management plan, including orifice plates, reed bed and bio-basin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | During construction and operation |
| Minimise visual impact               | 4.10 | Continue to manage the landscaped areas to ensure the vegetation screen remains effective.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | During operation                  |

| Outcome                        |      | Commitment                                                                                        | Timing              |
|--------------------------------|------|---------------------------------------------------------------------------------------------------|---------------------|
| Protect flora and fauna        | 4.11 | Continue to suppress weeds on the development site and protect remaining trees.                   | During construction |
| Monitor and report performance | 4.12 | Continue to monitor operations and report results as specified in the environment management plan | During operation    |

**Table 10 of the mushroom farm noise assessment report**

**Table 10: Plant/Equipment Sound Power Levels  $L_{Aeq}$  re:  $10^{-12}$  Watts**

| Plant Description                                                      | Sound Power Level |     |     |     |     |     |    |    |    |
|------------------------------------------------------------------------|-------------------|-----|-----|-----|-----|-----|----|----|----|
|                                                                        | dB(A)             | 63  | 125 | 250 | 500 | 1k  | 2k | 4k | 8k |
| Truck (moving)                                                         | 101               | 98  | 102 | 101 | 97  | 94  | 94 | 91 | 80 |
| Truck (idle)                                                           | 91                | 88  | 92  | 91  | 87  | 84  | 84 | 81 | 70 |
| Refrigerated Truck (SB310 refriger. unit)                              | 93                | 90  | 94  | 93  | 89  | 86  | 86 | 83 | 72 |
| JCB Telescopic Handler                                                 | 105               | 109 | 99  | 99  | 100 | 101 | 99 | 95 | 93 |
| Nufab Compost Turner                                                   | 93                | 93  | 94  | 93  | 90  | 88  | 84 | 80 | 75 |
| Head Filling Activities (truck engine, filling machine & peat loading) | 103               | 113 | 107 | 95  | 100 | 94  | 96 | 92 | 85 |
| Cooling Towers x2 (each) (AquaCool MSS 187LS3)                         | 99                | 91  | 87  | 88  | 90  | 95  | 93 | 87 | 84 |
| Compressors x 5 (total) (PowerPax TT400)                               | 93                | 82  | 82  | 85  | 85  | 89  | 86 | 79 | 83 |
| Steam Generator (ST3021)                                               | 99                | 89  | 89  | 94  | 94  | 96  | 93 | 87 | 82 |
| Humidification Boiler (Saacke SR1000/PAG10A)                           | 90                | 104 | 101 | 94  | 85  | 79  | 76 | 72 | 64 |
| Plant Room (space averaged) <sup>1</sup>                               | 95                | 84  | 84  | 87  | 87  | 91  | 88 | 81 | 85 |
| North Air Intake <sup>2</sup>                                          | 85                | 74  | 74  | 77  | 77  | 81  | 78 | 71 | 75 |
| Roof Air Discharge <sup>2</sup>                                        | 85                | 74  | 74  | 77  | 77  | 81  | 78 | 71 | 75 |
| AHU Ridge Vents <sup>3</sup>                                           | 63                | 66  | 62  | 60  | 61  | 59  | 51 | 46 | 40 |

Note: 1 All fixed plant in purpose designed plant room resulting in space averaged SPL of 95dB(A)  
2 Noise attenuation incorporated into plant room to result in source noise level of  $L_{w85dB(A)}$  for intake / discharge  
3 AHU would be installed wholly within roof space. Source noise level based on  $L_{w57}$  at discharge for AHU connected via ducted vents comprising a total of 74 vents, adjusted for 18 ridge top source points. AHU are ducted and could incorporate insulated ducting if required prior to discharge to meet specified limits.

Table 10 of the Substrate plant Noise assessment report

Table 10: External Plant/Equipment Sound Power Levels  $L_{Aeq}$  re:  $10^{-12}$  Watts

| Plant Description                                         | Sound Power Level |     |     |     |     |     |     |    |    |
|-----------------------------------------------------------|-------------------|-----|-----|-----|-----|-----|-----|----|----|
|                                                           | dB(A)             | 63  | 125 | 250 | 500 | 1k  | 2k  | 4k | 8k |
| Super Chill Condensers EWK-D680 (x6)                      | 83                | 79  | 81  | 81  | 78  | 75  | 73  | 76 | 72 |
| Compressor Room (external door) x2                        | 80                | 79  | 75  | 77  | 76  | 76  | 70  | 69 | 63 |
| Bioscrubber 2 Fans – each (x2)                            | 107               | -   | 106 | 104 | 107 | 100 | 98  | 92 | -  |
| Conveyor Drive – New Phase 3 (E-W)                        | 80                | 72  | 74  | 72  | 77  | 76  | 72  | 63 | 55 |
| Conveyor Belt – New Phase 3 (E-W)                         | 70*               | 75  | 75  | 70  | 70  | 63  | 59  | 52 | 43 |
| Conveyor Drive – New Phase 3 (N-S)                        | 80                | 72  | 74  | 72  | 77  | 76  | 72  | 63 | 55 |
| Conveyor Belt – New Phase 3 (N-S)                         | 70*               | 75  | 75  | 70  | 70  | 63  | 59  | 52 | 43 |
| Conveyor Drive – Pre Wet                                  | 80                | 72  | 74  | 72  | 77  | 76  | 72  | 63 | 55 |
| Conveyor Belt – Pre Wet                                   | 70*               | 75  | 75  | 70  | 70  | 63  | 59  | 52 | 43 |
| FEL – Volvo L90E                                          | 102               | 115 | 104 | 100 | 98  | 99  | 92  | 92 | 87 |
| FEL – Volvo L150E                                         | 105               | 120 | 104 | 103 | 102 | 99  | 97  | 95 | 91 |
| FEL – Komatsu WA320                                       | 104               | 114 | 102 | 100 | 102 | 99  | 96  | 93 | 86 |
| Traymaster Blender                                        | 110               | 109 | 110 | 109 | 108 | 104 | 102 | 99 | 96 |
| Pre-Wet Shed (average in shed)                            | 85                | 84  | 85  | 84  | 83  | 79  | 77  | 74 | 71 |
| Truck (moving)                                            | 101               | 98  | 102 | 101 | 97  | 94  | 94  | 91 | 80 |
| Loading Activities<br>(Phase 2/3 average in loading hall) | 86                | 81  | 84  | 85  | 85  | 81  | 78  | 73 | 65 |
| Loading Activities<br>(Phase 2/3 external facade)         | 63                | 66  | 68  | 63  | 61  | 60  | 49  | 43 | 37 |

\* sound power level per metre of conveyor

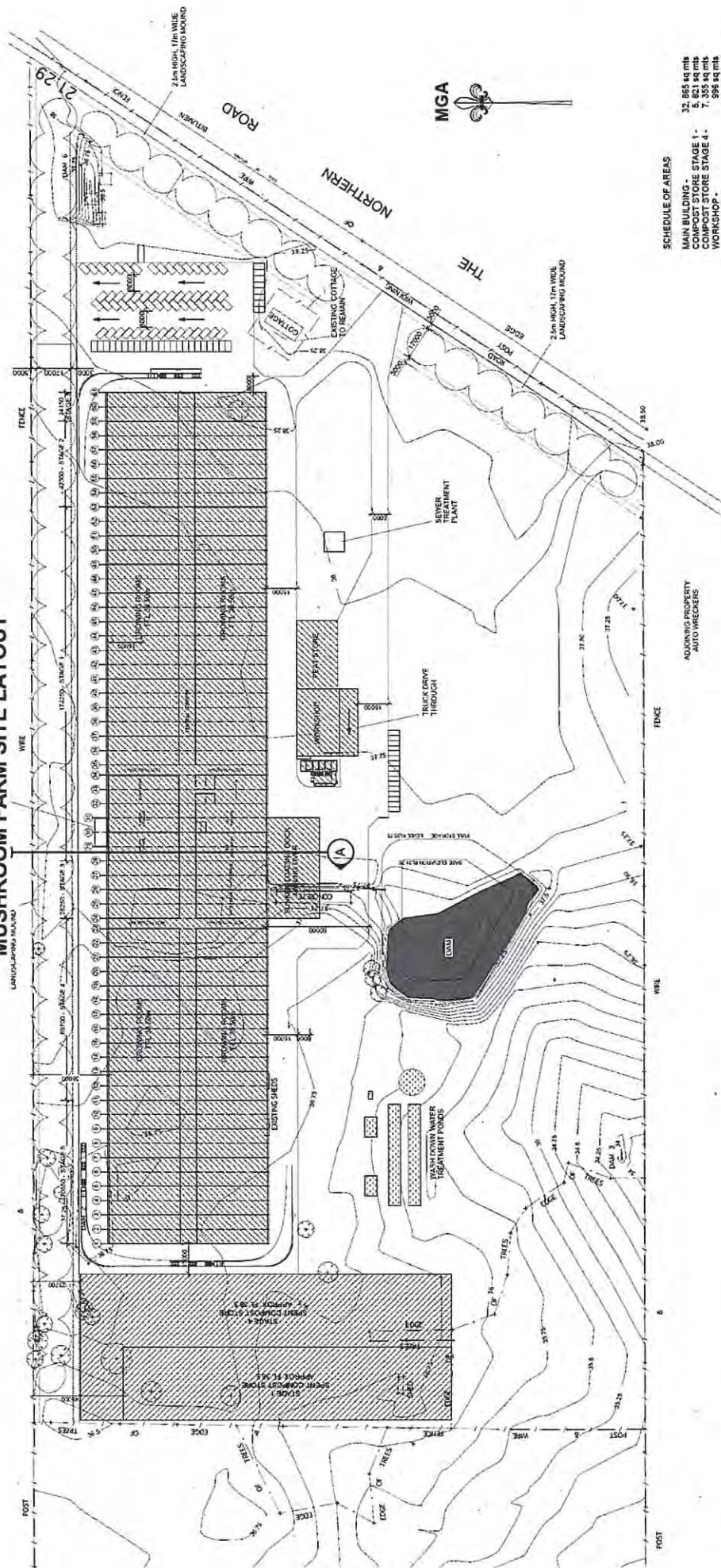


## APPENDIX 2



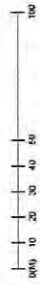
### Indicative Substrate Plant Site Layout

# APPENDIX 3 MUSHROOM FARM SITE LAYOUT



## SCHEDULE OF AREAS

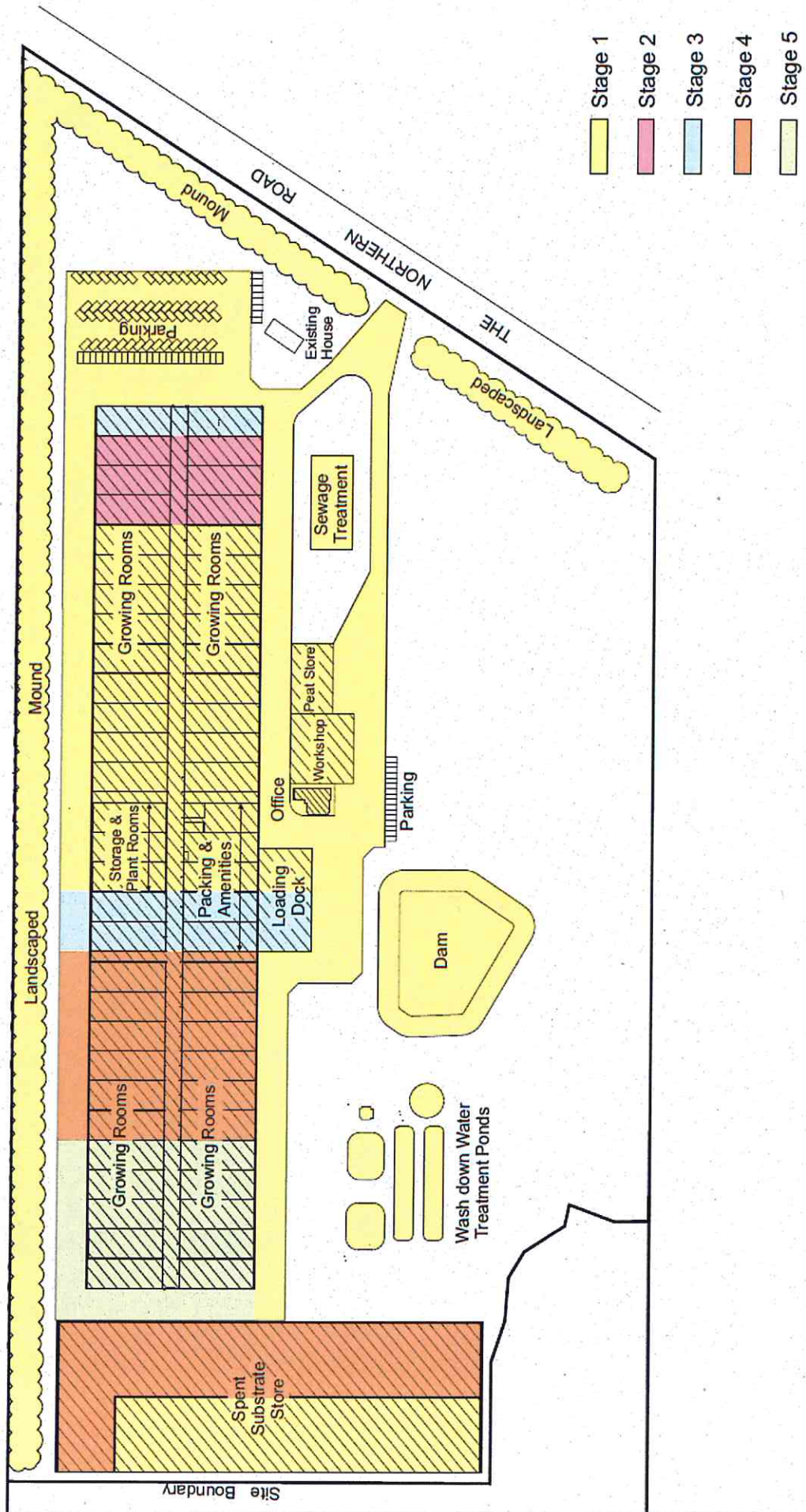
|                         |               |
|-------------------------|---------------|
| MAIN BUILDING -         | 32,865 sq mbs |
| COMPOST STORE STAGE 1 - | 5,821 sq mbs  |
| COMPOST STORE STAGE 4 - | 7,355 sq mbs  |
| WASH DOWN -             | 155 sq mbs    |
| PEN STORE -             | 872 sq mbs    |



Scale 1:1000

Indicative Mushroom Farm Site Layout

# APPENDIX 4 STAGES MUSHROOM FARM SITE



APPENDIX 5  
VEGETATION MANAGEMENT AREA

