# HUNTER VALLEY QUALITY MEATS (PRIMO SCONE) DEVELOPMENT

SCONE FREEZER EXTENSION & SLAUGHTER INCREASE

Date: 6 June 2014

# PROJECT OUTLINE

A Development Application is being lodged with Planning NSW to expand the meat processing facility operated by P&M Quality Smallgoods Pty Ltd to achieve the following:

- 1. Increase the beef slaughter floor throughput to a total 1520 head per day comprising two 7.6 hour shifts at a rate of 100 per hour.
- 2. Modification of the Beef Boning room, packing and pallet sortation to handle the increased throughput.
- 3. A new small stock slaughterfloor will be developed along with automated chiller and cutting room, adjacent to old pork chillers. The floor will process 3500 lambs per day on single shift at a rate of 7.5 lambs per minute.
- 4. The cold storage freezer & chiller capacity, blast freezing, carton sortation and loadout facilities will be updated, extended and expanded to accommodate the increased throughput, including review and upgrade of carton sortation and blast freezing systems required to achieve the capacities required.
- 5. An additional beef carcase chiller will be constructed to accommodate approximately 350 beef bodies.
- 6. Administration offices, and associated parking, will be relocated away from current site to enable the new cold storage facility to be constructed.
- 7. The development will represent an increase from 23,000 MIA units per week to 55,500 MIA units per week (comprising 7600 cattle@ 5units each for 38,000 units and 17,500 units for lamb at 1 MIA unit each).

# PRELIMINARY ENVIRONMENTAL ASSESSMENT

The applicant has commissioned specialised reports on the following aspects of the development proposal: noise, traffic, odour, wastewater disposal. All studies have commenced and will respond to the specifics in the draft Environmental Assessment Requirements (EAR's) supplied by Planning NSW on June 5 2014. An Environmental audit is also underway.

In addition, other points raised in the draft EAR's of 5 June 2014 submitted by associated agencies will be addressed e.g. community impact assessment, impact on flora, fauna and items of cultural significance. A site risk assessment will also be considered.

Herunder is preliminary discussion of relevant issues.

# 1. Noise

# **Existing Environment**

The existing environment where the plant operates double shift does not exhibit any chronic noise problems for nearby residents.

Occasional acute issues arise and they are dealt with contemporaneously. An example being when forklift noise was recently reduced through the construction of a smooth flat concrete apron for forklift movement to eliminate sound associated with forklift bounce (particularly forklift tines).

# **Potential Impacts of Proposal**

- Increased number of load-out trucks closer to residential areas.
- Potential of noise from refrigeration equipment

# **Mitigation Measures**

- All order preparation will be conducted in an environmentally sealed load-out dock
- Hours of load-out trucking movements will be controlled
- Refrigeration equipment placement and enclosures will be designed to minimize noise impacts
- A new tree line will be established between the plant and the nearest residents to the South of the plant

# 2. Traffic & Transport

# **Existing Environment**

Plant employee, incoming livestock and outgoing product currently occurs with the plant operating Monday to Friday on 2 shift basis.

# **Potential Impacts of Proposal**

- Working hours will not change and traffic movements will occur at similar times to the current plant.
- Employment numbers are projected to increase by 183 workers.
- The volume of livestock delivery and finished product movements will increase by almost 100%.
- It is projected that overall livestock and finished product transport movements will increase from between 210 and 240 incoming and outgoing movements per week to between 280-310 incoming and outgoing movements per week.

# **Mitigation Measures**

- The current employee cohort already utilize car pooling and this will be further encouraged
- There will be an increased use of DoubleB vehicles for livestock delivery and 40 foot containers and DoubleB vehicles for finished product dispatch resulting in fewer truck movements than otherwise.

- It is anticipated that the number of truck movements will decrease in 2014, when the current load limits are relaxed following the completion of construction work on the Aberdeen bridge.
- Truck movements will be controlled to minimize impact during traffic peaks.

# 3. Air Quality

# **Existing & Recent Developments**

The current operation of the plant does not create chronic odour problems for nearby residents.

Occasional odour queries arise and when investigated are often found to be transient and consequently it is difficult to define the source. If a source is identified then action is taken to control the odour.

# Rendering

In compliance with EPA advices, the rendering building and biofilter have been upgraded and odour complaints have been minimal over recent months since this work was completed.

The rendering plant has recently been upgraded with significant reduction in potential odour generation. In particular:

- The previous direct gas-fired drier which had the potential to emit smoke and burnt odours has been replaced with an indirect rotadisc steam-heated drier which completely eliminates the potential for discharged of smoke or burnt odours.
- A waste heat evaporator has been installed. This unit processes stickwater from the rendering plant in an enclosed environment and returns concentrated stickwater to the rendering plant, produces hot water from the drier and waste heat evaporator condensers and all remaining vapours are directed to the biofilter. This reduces the potential for the release of tramp odours that can occur when stickwater is discharged directly to waste and vapours are discharged directly to air.

#### Wastewater Treatment

The wastewater treatment system has also been considerably improved. In particular:

- Improved surface agitated aeration systems have been installed in the two aerobic ponds which have resulted in thorough pond mixing and sound dissolved oxygen levels which actively control the potential for odour discharge.
- The cover of the anaerobic pond is actively managed to ensure that the pond is completely covered at all times with a crust that effectively acts as an in-place biofiliter so that odour release is minimized.

# **Potential Impacts of Proposal**

- The volume of raw material to be rendered is projected to increase by some 60% to 70%
- The wastewater treatment system will need to be upgraded to process in the order of 50% to 60% more water than current operations

#### **Mitigation Measures**

# Rendering

• It is expected that the rendering plant throughput will be increased from 15tonne/hour to around 22tonne/hour so that the rendering occurs in the same

period as current production occurs which will eliminate the potential for generation of odour resulting from longer storage times for raw material.

• Because the discharge air from the direct-fired drier has been eliminated the biofilter is now approximately double the size necessary for the current equipment configuration and this provides the opportunity to direct other potential odour sources to the biofilter.

## Wastewater Treatment

• The potential to install a cover on an expansion of the anaerobic pond volume and capture and utilise biogas will be investigated as an alternative to active management of the pond crust. Installation of a cover also has the potential to provide benefits from greenhouse gas mitigation programs.

# 4. Water & Wastewater

#### **Existing Environment**

Current plant operations utilise and produce in the order of 9 to 10 Megalitres of water per week.

#### **Potential Impacts of Proposal**

Increased production at the plant is expected to increase the water and wastewater volumes to 12.5 to 14 Megalitres per week.

#### **Mitigation Measures**

- The anaerobic, aerobic and maturation treatment pond volumes will be adjusted to ensure that hydraulic resident times are sufficient for adequate treatment of the wastewater prior to discharge to either irrigation or to the wet weather storage pond.
- Wet weather storage will be increased substantially to eliminate the need to irrigate in wet weather conditions and to allow most efficient practices to be implemented to utilise the treated wastewater in the irrigation areas.
- The potential to install a cover on an expansion of the anaerobic pond volume and capture and utilise biogas will be investigated as an alternative to active management of the pond crust. Installation of a cover also has the potential to provide benefits from greenhouse gas mitigation programs.

# 5. Land

#### **Existing Environment**

Currently the treated wastewater is irrigated onto approximately 67 hectares of land owned and managed by Primo. A "Land Irrigation Capability Report" has recently been submitted to the EPA in compliance with Condition U1 of the current EPA license.

#### **Potential Impacts of Proposal**

- Irrigation requirements are projected to increase from around 360 to 370 Megalitres per annum to 550 to 560 Megalitres per annum (less than water use due to evaporation and system losses).
- At a nominal irrigation rate of 6.25 Megalitres/Ha/annum (See Land Irrigation Capability Report) there is a projected need to have 89 Ha of irrigation area available.

## **Mitigation Measures**

- Primo has recently commenced discussion with the EPA to increase the land area for irrigation to 91Ha of land, owned and managed by Primo, which would be sufficient for the current projections.
- More land is available for irrigation on the Tyrone property if required.
- Wet weather storage will be increased to reduce potential for overflow and allow implementation of good irrigation management practices.

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