STATE SIGNFICANT DEVELOPMENT ASSESSMENT:

Murray Goulburn Milk Processing Facility (SSD 6026)

Director-General's
Environmental Assessment Report
Section 89H of the
Environmental Planning and Assessment Act 1979

December 2013

Cover photo: Milk silos at a milk processing facility

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EXECUTIVE SUMMARY

Murray Goulburn Cooperative Co. Limited (**MGC**) is a dairy farmers' cooperative. The company processes about 3 billion litres of milk every year in a number of plants in Victoria and Tasmania, making it one of Australia's largest dairy producers. It owns the retail brand 'Devondale' and produces a range of dairy products for both domestic and international markets.

MGC has entered into a 10 year partnership with Coles Supermarkets for the supply of daily pasteurised milk for both Devondale and Coles brands in NSW and Victoria from July 2014. To meet its supply obligations, MGC proposes to construct and operate a $64.88 million milk processing facility on an industrial site at Erskine Park.

The facility would process up to 150 million litres per year of raw milk from dairy farms in NSW to produce daily pasteurised milk in 1, 2 and 3 litre plastic bottles for distribution to NSW supermarkets. It is State Significant Development (**SSD**) because it meets the threshold criteria for agricultural produce industries in Clause 3 of Schedule 1 to *State Environmental Planning Policy (State and Regional Development) 2011*.

The Erskine Park site is strategically located a short distance by road to both the M4 and M7 motorways, and to the Coles chilled distribution centre, which is nearby in Eastern Creek. The site is zoned IN1 – General Industry and it is located within the Erskine Park Employment Lands as described by *State Environmental Planning Policy (Western Sydney Employment Area) 2009*.

The Department advertised the SSD application and consulted with Penrith City Council and a number of relevant state agencies. Council and all agencies were generally supportive of the proposal and recommended approval conditions relevant to their respective areas of interest. The Department received one letter of support from a member of the public.

The key environmental issues for the Department's assessment were air quality and odour. MGC has committed to, and would be required by the recommended approval conditions to implement best practice air emission and odour controls, which include among other things, the installation of low emission gas boilers, a fully enclosed wastewater treatment plant, a thorough daily hygiene regime for all silos and processing equipment, and ongoing odour and emissions auditing. Residual impacts, such as those resulting from traffic, noise, hazards, waste and others are minor and generally within the scope of impacts expected for an industrial land use on industrial zoned land and can be adequately managed by the Department's recommended approval conditions.

The nearest sensitive and residential receivers are 800 m to the south and west, and are distant enough so as not to be adversely affected by noise, odour, air emissions or other amenity impacts.

The facility would create 45 full time equivalent jobs. It would add value to raw milk produced by dairy farms in NSW and allow MGC to fulfil its 10 year agreement without the need to transport bottled milk from interstate. It is directly in-line with Goal 1 of *NSW 2021,* which is to improve the performance of the NSW economy by way of growing business investment, growing the value of primary industries, and growing employment. It also strongly correlates with the aims of the draft *Metropolitan Strategy for Sydney to 2031*, which are to support jobs growth in manufacturing on employment lands in the Western Sydney Employment Area.

The SSD application falls under the Minister's delegation dated 27 February 2013 because Penrith Council did not object to the proposed development; MGC did not disclose any political donations; and there were fewer than 25 public objections (nil). Therefore, the Executive Director, Development Assessment Systems and Approvals may determine the application.

The Department considers the proposed development is in public interest and recommends approval subject to conditions.

1. BACKGROUND

1.1 Background

Murray Goulburn Cooperative Co. Limited (**MGC**) is a dairy farmers' cooperative. The company processes about 3 billion litres of milk every year in a number of plants in Victoria and Tasmania, making it one of Australia's largest dairy producers. It owns the retail brand 'Devondale' and produces a range of dairy products for both domestic and international markets.

MGC has entered into a 10 year partnership with Coles Supermarkets for the supply of daily pasteurised milk for both Devondale and Coles brands in NSW and Victoria from July 2014. To meet its supply obligations under the partnership, MGC plans to invest $120 million in the development of milk processing facilities in Melbourne, and at Erskine Park in Western Sydney.

At the Erskine Park site, MGC proposes to construct a new milk processing facility, which would receive 150 million litres of raw milk per year from dairy farms in NSW. The raw milk would be pasteurised, bottled and packaged into crates, before being transported to the Coles chilled distribution centre, which is nearby in Eastern Creek, for distribution to supermarkets across NSW.

1.2 Subject site

The site is legally known as Lot 1022 DP 1175670. It is an irregular shape of 5.077 hectares (**ha**), which was created by Torrens subdivision in 2008 following subdivision approval from Penrith Council. The site is located at 111-113 Quarry Road, Erskine Park, which is about 11 kilometres (**km**) south east of Penrith.

The site is zoned IN1 – General Industry and is located within the Erskine Park Employment Lands as described in *State Environmental Planning Policy (Western Sydney Employment Area) 2009*.

The site is strategically located a short distance to both the M4 and M7 motorways, and the chilled distribution facility. The chilled distribution facility is about 7.8 km by road east of the site on Old Wallgrove Road, which continues a further 1.1 km until it joins the M7 motorway. Both Mamre Road and Erskine Park Road join the M4 motorway about 4 km north of the site.

There are industrial premises to the west and southwest. The site is part of the Western Sydney Employment Area with many newly developing industrial premises nearby. A biodiversity corridor flanks the southern boundary of the subject site and it has an E2 Environmental Conservation zoning. The Eammus Village (an aged care facility) and a primary school complex are located further south of the biodiversity corridor, about 800 metres (**m**) from the subject site. The nearest private dwellings are located on Mamre Road about 800m to the west of the site (see **Figure 1**).

The land was once part of a former breccia (roadbase) quarry. The quarry pit remains to the north of the subject site and it currently operates as a non-putrescible landfill with approval to continue until 2021. The landfill is already zoned E2 Environmental Conservation and it is to be rehabilitated after its closure. The subject site was formerly the site of a bitumen plant associated with the quarry. Approximately 1500m^3 of hydrocarbon contaminated soil (probably from the bitumen plant operation) has been bio-remediated such that the site is suitable for the proposed facility.

The subject site has been bulk filled to depths ranging from 2.5m up to 8.5m under the Council's subdivision approval. A 4m to 6m high retaining wall exists along the northern boundary, retaining earthwork on the adjoining site, while a 4m to 6m high earth batter (partly retained with a number of retaining walls) exists along the southern boundary adjoining the biodiversity corridor. There is no vegetation on the site.

Figure 1: *Locality map*

2. PROPOSED DEVELOPMENT

2.1 Development description

The proposed development comprises the construction and operation of a milk processing facility to produce daily bottled pasteurised milk for distribution to supermarkets in NSW. Up to 150 million litres of raw milk per year would be delivered to the facility in milk tankers from dairy farms in NSW.

The raw milk would be pasteurised, homogenised (or separated in the case of cream and low fat milk products) and bottled in daily production runs. The bottled milk would then be dispatched in milk-crates to a chilled distribution centre, which is located nearby in Erskine Park, for distribution to NSW supermarkets.

Hygiene is a very important part of milk processing and following each daily production run, all milk silos, lines and processing equipment would be rinsed and sanitised using a built-in hygiene system (known as a 'clean-in-place' hygiene system).

In addition to the milk processing equipment and the clean in place hygiene system, there would be gas-fired boilers, which produce steam for the pasteurisation process, chemical storage for the clean-in-place hygiene system, and a waste water treatment system, which pre-treats rinse water before it is disposed to the public sewer main.

The main components of the development are summarised in **Table 1**, and depicted in **Figures 2, 3** and **4**. The development is described in full in the applicant's Environmental Impact Statement (**EIS**), which is attached as **Appendix B**.

Table 1: *Main components of the development*

Component	***Description***
Project Summary	• Construction and operation of a milk processing facility. • Annual processing capacity of 150 million litres of raw milk. • Includes the installation of: o refrigerated milk silos; o a pasteurising system fitted with a 'clean in place' hygiene system; o a wastewater treatment system; and o a gas-fired energy centre.
Final products	• 1, 2 and 3 litre plastic bottles of whole and low fat pasteurised milk; • Bulk pasteurised cream; and • Milk solids (a byproduct used as stock feed).
Operating hours	• 24 hours, 7 days.
CIV	• $64.88 million.
Employment	• 45 full time equivalent operational jobs.
Buildings	• 6,331m^2 of factory floor up to 9.45m high; and • 3,681m^2 of attached and detached floor area for amenities, plant, and delivery or load-out canopies.
Silos	• 3 x 200kL raw milk silos 19.5 m high.
Ancillary structures	• 2 x 500L water tanks (fire management); and • Driveway/hardstand including parking for 53 cars totaling 20,616m^2.
Hygiene System	• 10,000 litre caustic solution storage; • 10,000 litre acid solution storage; and • 5,000 litre oxidizing solution storage.
Energy Centre	• 2 x 2 megawatt gas-fired boilers; and • Peak gas flow 30,000 megajoules/hour.
Wastewater treatment	• Capacity to treat 450 kilo-litres per day; and • Milk solids removal and pH balancing before disposal to sewer.

MURRAY GOULBURN
PROJECT INVERLOCH
VIC and NSW PLANTS
BLOCK PROCESS DIAGRAM

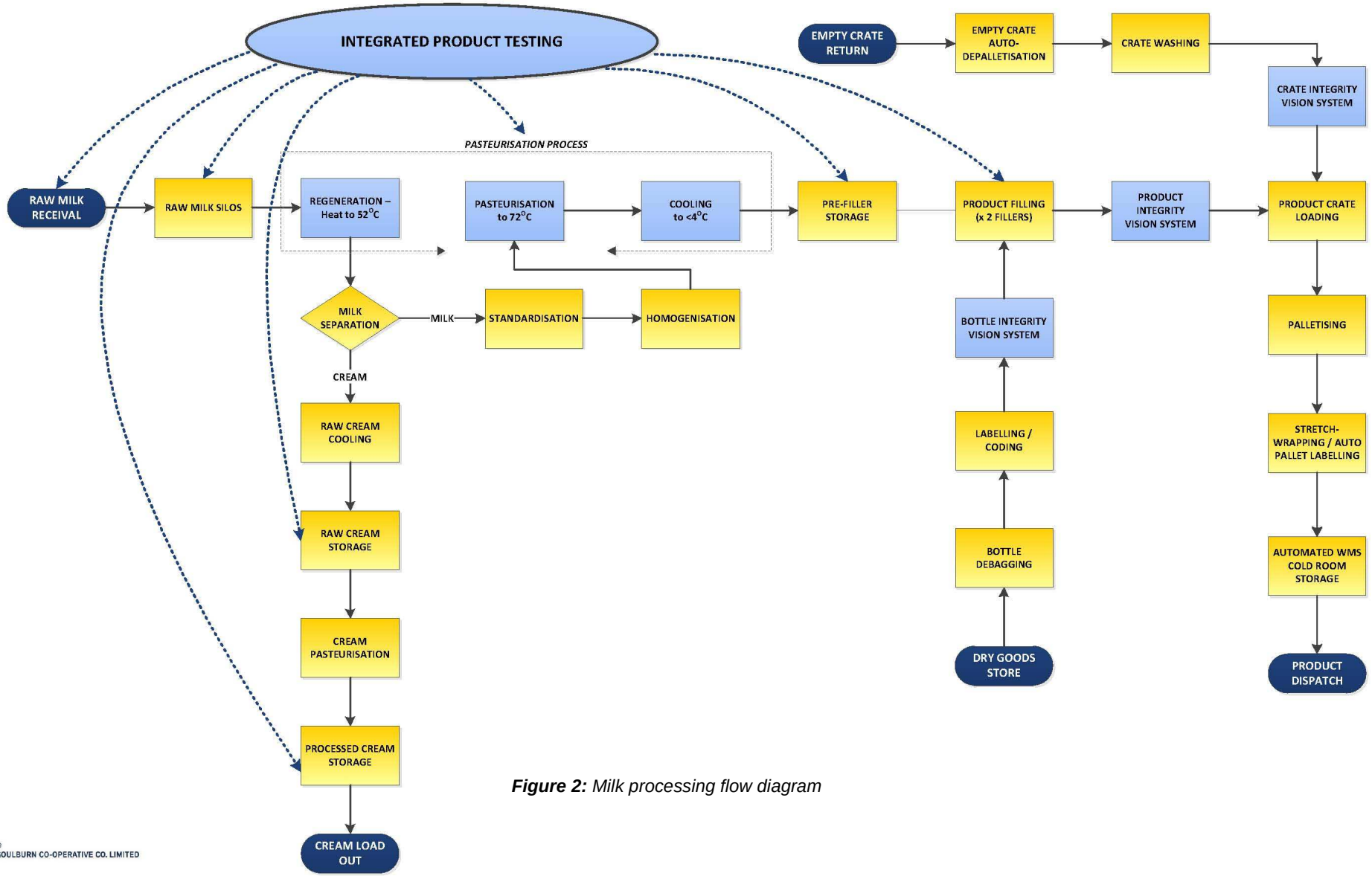
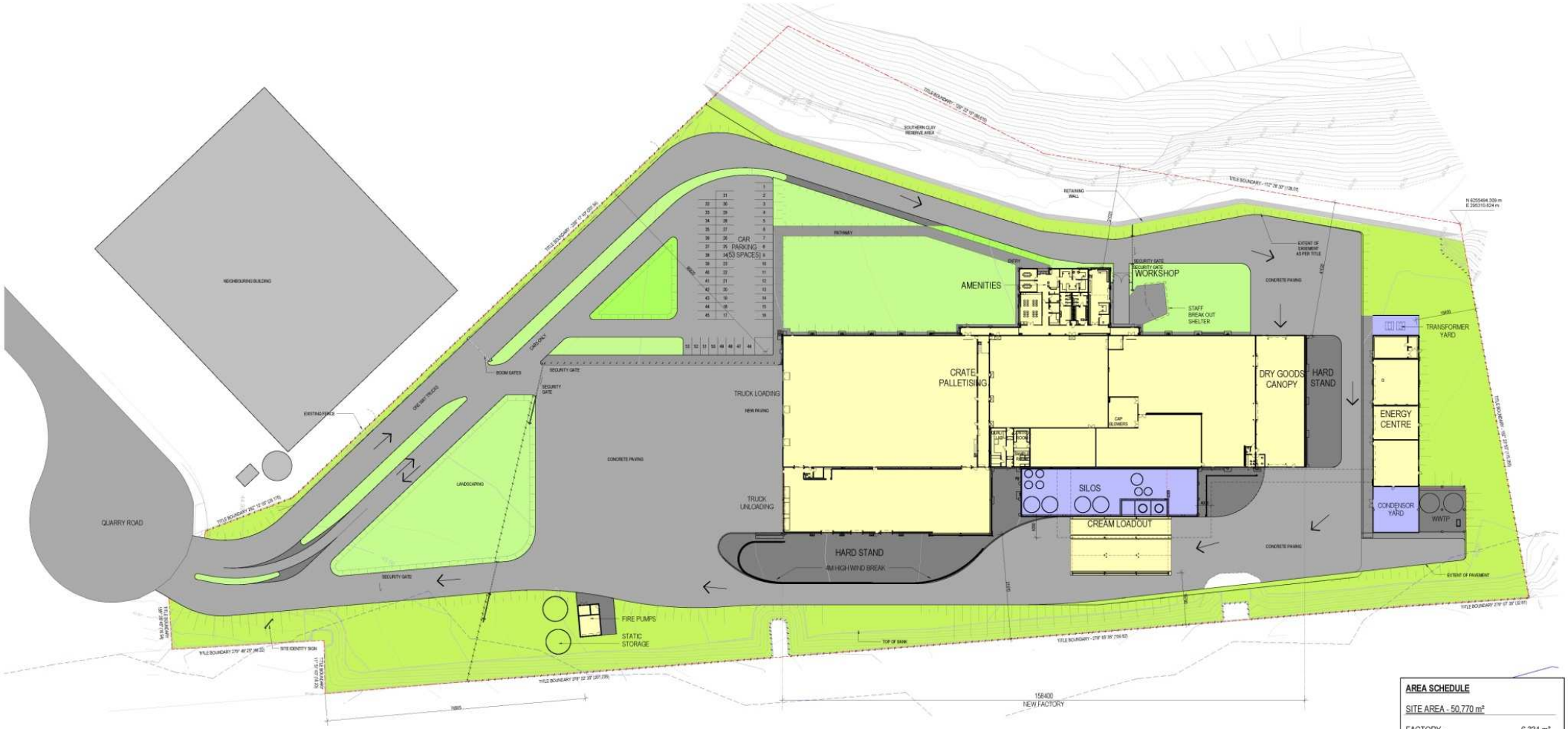


Figure 2: *Milk processing flow diagram*



AREA SCHEDULE

SITE AREA - 50,770 m²

FACTORY -	6,331 m²
AMENITIES & WORKSHOP -	624 m²
CRATE RETURN/ WASH CANOPY -	1,285 m²
PLANT ROOM (L1) -	553 m²
ENERGY CENTRE -	642 m²
MILK RECEIVAL CANOPY -	513 m²
FIRE PUMP HOUSE -	63 m²
TOTAL GROSS FLOOR AREA -	10,012 m²
OVERALL SITE COVERAGE -	19.7%
ROADWAYS & HARDSTAND AREA INCLUDING TANK FARM -	20,616 m² (41%)

Figure 3: *Site plan*

Scale @ B1 1 : 500

Date	No.	Revision Description	By	Date	No.	Revision Description	By	Date	No.	Revision Description	By
03.06.13	P1	PRELIMINARY FOR DISCUSSION									
07.06.13	P2	PRELIMINARY FOR DISCUSSION									
14.06.13	P3	PRELIMINARY FOR DISCUSSION									
20.06.13	P4	PRELIMINARY FOR DISCUSSION									
27.06.13	P5	PRELIMINARY FOR DISCUSSION									
27.06.13	P6	PEA ISSUE									
10.07.13	P7	PEA ISSUE									
08.08.13	P8	PRELIMINARY SSD ISSUE									
20.08.13	P9	SSD ISSUE									

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Project
PROJECT INVERLOCH (NSW) - LOT 1022, QUARRY ROAD, ERSKINE PARK NSW

MURRAY GOULBURN CO-OPERATIVE CO. LTD

Drawing Title
SITE LAYOUT PLAN

Date: JUNE 2013
Drawn By: JW
Scale @ B1: 1 : 500

Job No. 1325
Drawing No. DA02
Rev P9

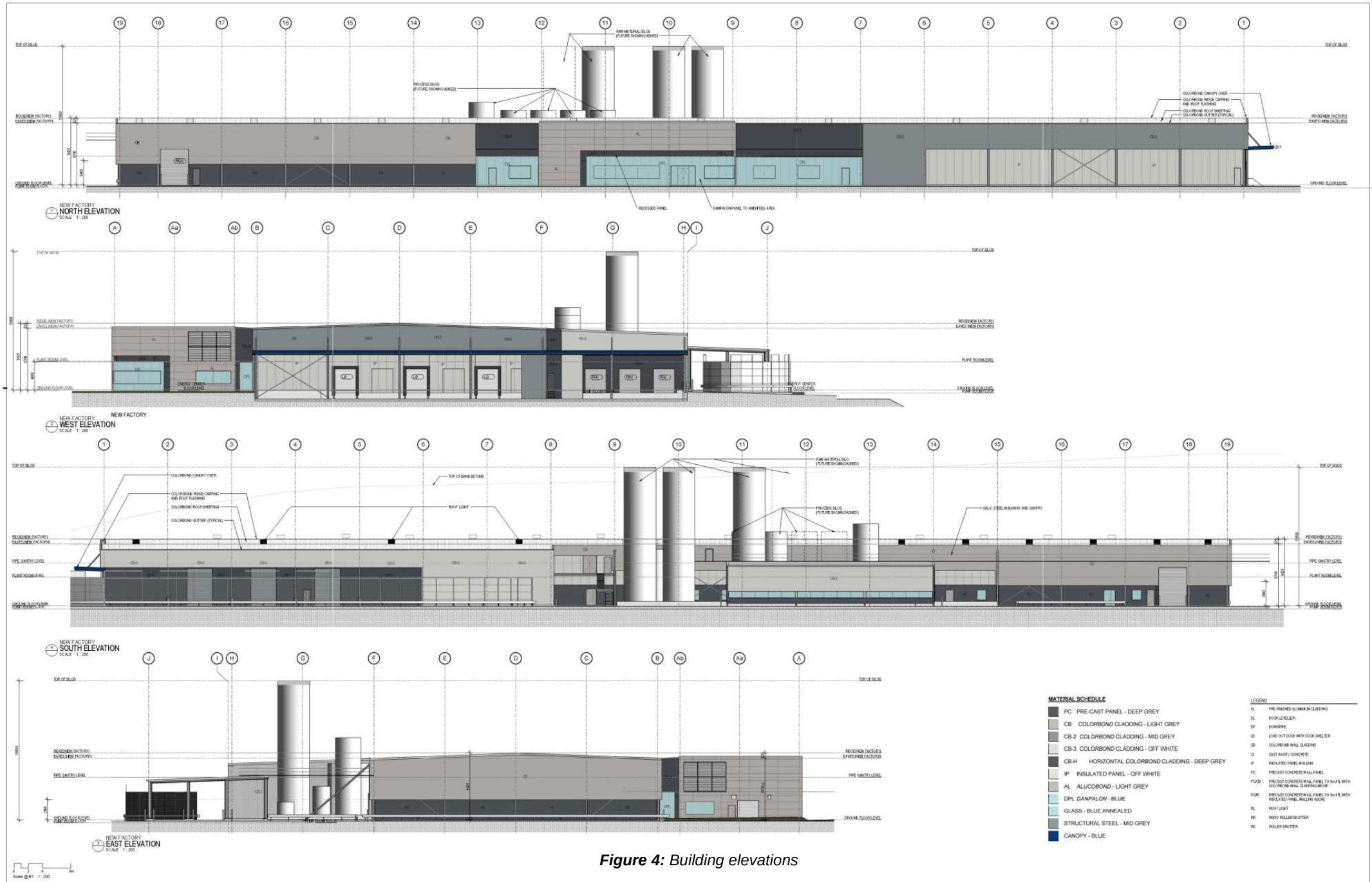

Figure 4: *Building elevations*

Date	No.	Revision Description	By
03.06.13	P1	PRELIMINARY FOR DISCUSSION	JW
14.06.13	P2	PRELIMINARY FOR DISCUSSION	JW
21.06.13	P3	SSD ISSUE	BG
28.06.13	P4	PRELIMINARY SSD ISSUE	BG
30.06.13	P5	SSD ISSUE	BG

Contractors must verify all dimensions on site prior to commencing any work or making any shop drawings.

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Project:
PROJECT INVERLOCH (NSW) - LOT 1022, QUARRY ROAD, ERSKINE PARK
NSW

MURRAY GOULBURN CO-OPERATIVE CO. LTD

Drawing Title:
ELEVATIONS

Date: JUNE 2013
Drawn By: JW
Scale @ B1: 1 : 200

Job No. 1325
Drawing No. DA04
Rev. P5

2.2 Development Staging

The applicant has obtained development consent for local development from Penrith Council for a number of preliminary construction works that are associated with the work required for the current SSD application, as follows:

- bulk earthworks to re-profile the site and form a level building platform;
- foundations comprising 200 piles individually drilled up to 8m depth (see **Figure 5**);
- limited temporary drainage works such as clean water diversion and a detention basin;
- temporary site access and construction compound (including amenities and office); and
- some steel structural framework.

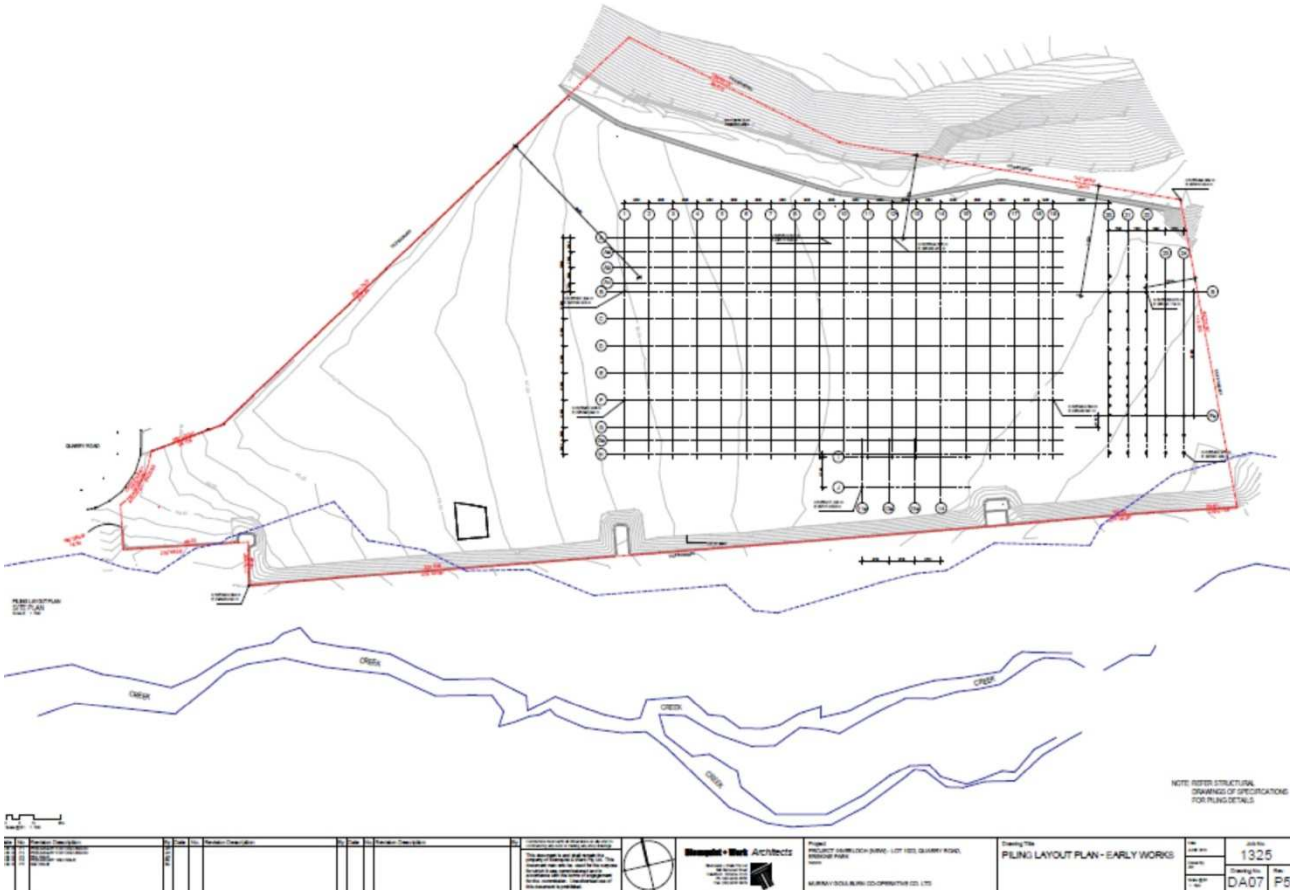

Figure 5 *– Location of piled foundations (preliminary works)*

The preliminary works are already underway under the Council consents. Once the preliminary works are complete and Occupation Certificates issued by the Principle Certifying Authority, the Council consents should be surrendered so that there is a single SSD approval governing the site and the operation. The Department has included an appropriate surrender condition in the recommendation.

The construction work that remains to be completed under the SSD application includes:

- detailed earthworks and precise contouring to finalise the shape and drainage of the site;
- permanent drainage systems including trash traps, pits and pipes;
- internal factory and coolroom fit-out including fire safety services;
- installation of utilities including the on-site waste water system and energy centre; and
- external paving, parking, fencing and landscaping.

The combined construction program for the preliminary works and the SSD works is expected to take 40 weeks. Construction would occur within standard construction hours, which are 7am to 6pm Monday to Friday and 8am to 1pm Saturday.

3. STRATEGIC AND STATUTORY CONTEXT

3.1 Strategic Context

The proposed development has a capital investment value of $64.88 million and would create 45 full time equivalent jobs at the Erskine Park site in the Western Sydney Employment Area. It would add value to raw milk produced by dairy farms in NSW and allow MGC to fulfil a 10 year milk supply agreement with Coles without the need to transport bottled milk from interstate.

The proposed development is directly in-line with Goal 1 of *NSW 2021,* which is to improve the performance of the NSW economy by way of growing business investment, growing the value of primary industries, and growing employment.

The proposed development also strongly correlates with the draft *Metropolitan Strategy for Sydney to 2031*, which aims to support jobs growth in manufacturing and new technology on designated employment lands in the Western Sydney Employment area.

3.2 State Significant Development

The proposed development is State Significant Development (**SSD**) under Section 89C of the *Environmental Planning and Assessment Act 1979* (**the Act**). It is an agricultural produce industry with a capital investment value of more than $30 million and therefore it meets the criteria in Clause 3 of Schedule 1 to *State Environmental Planning Policy (State and Regional Development) 2011*. Consequently, the Minister for Planning and Infrastructure is the consent authority for the proposed development.

However, the application falls under the Minister's delegation dated 27 February 2013 as Penrith Council did not object to the proposed development; the Applicant did not disclose any political donations; and there were fewer than 25 public objections (nil). Therefore, the Executive Director, Development Assessment Systems and Approvals may determine the application under delegation.

3.3 Permissibility

The proposed development is located within the Penrith local government area. It is situated on land that is zoned IN1 General Industrial under *State Environmental Planning Policy (Western Sydney Employment Area) 2009.* The proposed development is characterised as an industry, which is permissible with consent on the land.

3.4 Integrated Approvals

The Applicant would require an Environmental Protection Licence (**EPL**) from the Environment Protection Authority (**EPA**) under the *Protection of the Environment Operations Act 1997* to carry out the development. Under Section 89K of the Act, the EPL must be approved in a manner that is consistent with any consent. Therefore, the Department has consulted with the EPA and considered its advice relating to the issue of an EPL. The EPA advises that should consent be granted, an EPL could be issued for the premises.

3.5 Other Approvals

The Applicant would also require a separate licence to process dairy products from the NSW Food Authority under the *Food Regulation 2010*.

3.6 Matters for Consideration

A consent authority must take into consideration the matters set out in Section 79C of the Act in relation to the proposed development. The Department has considered the proposed development against these matters, as shown in **Appendix F** to this report.

3.7 Exhibition and Notification

The Director-General is required to make an application for SSD and any accompanying information publicly available for at least 30 days under Section 89F(1) of the Act. After accepting the Environmental Impact Statement (**EIS**) for the proposal, the Department:

- made it publicly available from 2 October 2013 to 11 November 2013**:**
  - on the Department's website and in its Information Centre;
  - at the Nature Conservation Council's office; and
  - at Penrith City Council's administration office.
- notified landowners in the vicinity of the site about the exhibition period by letter;
- notified relevant State government authorities and Penrith City Council by letter; and
- advertised the exhibition in the Penrith Press and the Penrith Western Weekender.

3.8 Environmental Planning Instruments

The consent authority must take into consideration the provisions of any Environmental Planning Instrument (**EPI**) and any draft EPI that has been exhibited when determining an application for SSD. Relevant environmental planning instruments include:

- *State Environmental Planning Policy (State and Regional Development) 2011;*
- *State Environmental Planning Policy (Western Sydney Employment Area) 2009;*
- *State Environmental Planning Policy (Infrastructure) 2007;*
- *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development;*
- *State Environmental Planning Policy No. 64 – Advertising and Signage;*
- *State Environmental Planning Policy No. 55 – Remediation of Land;*
- *State Environmental Planning Policy No. 19 – Bushland in Urban Areas;*
- *State Environmental Planning Policy No. 44 – Koala Habitat; and*
- *Sydney Regional Environmental Plan No. 20 – Hawkesbury – Nepean River.*

The Department has considered the proposed development against these instruments, as shown in **Appendix G** to this report. In summary, the Department is satisfied that the proposal is consistent with the relevant aims, objectives and provisions of these instruments.

While not strictly applicable to State Significant Development, the Department has also considered the proposed development against the Penrith City Centre Development Control Plan 2006, and this assessment is also at Appendix G.

3.9 Objects of the Act

In determining the application, the consent authority should consider whether the proposal is consistent with the relevant objects of the Act. These objects are detailed in Section 5 of the Act, and are reproduced below:

(a) to encourage:
- *(i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- *(ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- *(iii) the protection, provision and co-ordination of communication and utility services,*
- *(iv) the provision of land for public purposes,*
- *(v) the provision and co-ordination of community services and facilities, and*
- *(vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- *(vii) ecologically sustainable development, and*
- *(viii) the provision and maintenance of affordable housing, and*

(b) to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and

(c) to provide increased opportunity for public involvement and participation in environmental planning and assessment.

The Department has considered the objects of the Act, including the encouragement of Ecologically Sustainable Development (**ESD**), in its assessment of the application. The Department considers that objects 5(a) (i), (ii), (vi) and (vii), 5(b) and 5(c) are most relevant to the assessment of this application. The Department has given consideration to these objects in its assessment of the proposal (see **Table 3**).

***Table 3**: Objects of the Act and relevance to the development*

Object	***Consideration***
5(a)(i)	The proposal would ensure the proper management and development of suitably zoned (i.e. industrial) land for the economic enhancement of the community including the creation of approximately 45 full-time equivalent jobs at Erskine Park. The proposal has been designed to meet current best practice environmental standards. The potential impacts of the development will be minimised through appropriate site selection, site layout, design and proposed environmental control measures.
5(a)(ii)	The proposed development is located on suitably zoned industrial land and would be used economically to ensure the on-going employment of a total of 45 operational staff.
5(a)(vi)	The Department's assessment in Section 5 of this report demonstrates that with the implementation of the recommended conditions of consent, the impacts of the development can be mitigated and/or managed to ensure the environment is protected.
5(a)(vii)	The site preparation works for this proposal, including site clearing and earthworks, are being completed under an earlier Council approval. The proposal is therefore unlikely to have an adverse impact on native flora or fauna, including threatened species, populations and ecological communities, and their habitats.
5(b)	The Department has assessed the development in consultation with, and giving due consideration to, the technical expertise and comments provided by other Government authorities (including Penrith City Council) on the development. This is consistent with the object of sharing the responsibility for environmental planning between the different levels of government in the State.
5(c)	The application was exhibited in accordance with Section 89F(1) of the Act to provide public involvement and participation in the environmental planning and assessment of this application.

3.10 Ecologically Sustainable Development

The *Protection of the Environment Administration Act 1991* states that ESD requires the effective integration of economic and environmental considerations in decision-making processes and that ESD can be achieved through the implementation of:

(a) the precautionary principle;
(b) inter-generational equity;
(c) conservation of biological diversity and ecological integrity; and
(d) improved valuation, pricing and incentive mechanisms.

Where potential impacts of the proposed development have been identified, mitigation measures and environmental safeguards have been recommended. As demonstrated by the Department's assessment in Section 5 of this report, the proposal would have no adverse impacts on native flora or fauna, including threatened species, populations and ecological communities, and their habitats and is therefore considered to be consistent with the principles of ESD.

4. CONSULTATION

During the exhibition period, the Department received a total of 6 submissions on the proposal with 5 from agencies and 1 letter of support from the public. A summary of the issues raised in submissions is provided below. A full copy of the submissions is attached in **Appendix C**.

4.1 Agency submissions

The **Environment Protection Authority (EPA)** did not object to the proposal. It noted that the facility would require an Environment Protection Licence under Schedule 1 of the *Protection of the Environment Operations Act 1997* and determined that one could be issued, subject to conditions. The Department has formalised the EPA's conditions in the recommended conditions of development consent.

Penrith City Council (Council) did not object to the proposal. It suggested that the proposal should include sleeping quarters for long haul truck drivers, an outdoor area attached to the lunch room for staff, and black low-visibility security fencing.

Raw milk would largely come from dairy regions in NSW and truck drivers are highly unlikely to require or utilise overnight accommodation on the site. In any case, such facilities would require supplementary truck parking, and a separate additional building, which is outside the scope of the current proposal. An outdoor area for the lunch room would present difficulties to maintaining the high level of hygiene required at the facility and is not required. The Department has included an appropriate condition in the recommendation for the security fence specifications.

Roads and Maritime Services (RMS) did not object to or have any requirements for the proposal. It noted that there would be no significant impact on the classified-road network.

Sydney Water Corporation (SWC) did not object to the proposal and noted that nearby water and sewer mains were available for connection for the development. The applicant would be required to lodge a trade waste application with SWC to send wastewater to sewer.

The **Department of Primary Industries NSW Office of Water (NOW)** raised several concerns about whether earthworks and the construction of pile footings for the proposed development were likely to intersect with and consequently impact on groundwater. However, these works have already been carried out under the preliminary-works consent from Penrith Council. MGC reported to the Department that groundwater was not intercepted during these works. NOW also recommend that the stormwater outlet structure be placed to avoid disturbing remnant native vegetation. The Department notes that the stormwater outlet has been designed so that no remnant vegetation requires removal.

The **Office of Environment and Heritage (OEH)** stated that it did not wish to make comment on the proposal.

4.2 Public submissions

The Department received one public submission, which supported the proposed development. It stated that the facility would provide long term jobs and infrastructure for the Australian dairy industry. The Department has noted the letter of support.

4.3 Submissions Report

MGC prepared and submitted a response to all of the issues raised in submissions in a formal Submissions Report, which was received by the Department on 28 November 2013 (attached in **Appendix D**). The report includes a revised suite of Management and Mitigation Measures (formerly a Statement of Commitments), which would form part of the conditions of any approval for the development.

5. ASSESSMENT

In assessing the proposal, the Department has considered the EIS, all submissions received during the exhibition of the application, and MGC's Submissions Report and revised Management and Mitigation Measures. The Department also considered the provisions of relevant environmental planning instruments, Section 79C and the objects of the Act, including the principles of ESD. The Department considers the key issues associated with the development to be air quality and odour which are addressed in Section 5.1. All other issues are assessed in Section 5.2.

5.1 Air quality and odour

The EIS included an Air Quality Impact Assessment undertaken by PAE Holmes (Technical Paper 1 to the EIS). This assessment included dispersion modelling to predict the potential air quality impacts at nearby receivers. It also discussed a range of measures to avoid or mitigate such impacts.

There would be a number of potential sources of air and odour emissions from the development. During construction, the main air emissions would be wheel and wind generated dust. During operation, the main air emissions would be combustion gases from the boiler, while the on-site wastewater treatment plant is a potential source of hydrogen sulphide based odour emissions.

In the immediate receiving environment, there are a number of sensitive land uses. The Emmaus Village aged care facility and a primary school complex are located about 800m to the south, while the nearest private dwellings are located about 800m to the west and south. The nearest residential area is the suburb of Erskine Park, which is around 1 km to the north (see **Figure 6**).

Figure 6 *– The location of sensitive receivers*

These receivers are distant from the site and are not vulnerable to katabatic winds (i.e. downhill cold air drainage) because of the gently undulating topography. In addition, air quality in the area is generally quite good. For key air quality indicators, the EPA's ambient air quality monitor at St Mary's, 5km from the site, recorded for the period 2008 to 2013, maximum values for:

- annual average NO_2 of 11.6 µg/$m^{3,}$ which is just 19% of the EPA air quality criteria; and
- annual average PM_{10} of 15.1 µg/m^3 which is 50% of the EPA air quality criteria.

Construction emissions
During construction, the primary air emission potential would be wheel and wind generated dust. Dust emissions from construction sites are readily controllable by way of standard construction site dust and sediment controls. These standard construction site controls include watering, stockpile covering, reduced truck speeds and implementing a Construction Environmental Management Plan (**CEMP**) for the duration of the construction schedule. Much of the significant earthworks have already been completed as part of the preliminary works consent, although MGC will need to maintain and augment the site controls for the remaining duration of the construction schedule. Therefore, the Department has included a CEMP condition in the recommended approval conditions.

Operational mitigation measures
MGC has committed to mitigation measures, which include the use of a low nitrogen oxide emissions boiler with waste heat recovery (to reduce gas consumption and therefore emissions), and for the minimisation of odour emissions, a rigorous daily hygiene regimen for all processing equipment, refrigeration of the raw milk and packaged milk products to prevent spoilage, and the enclosure of the wastewater treatment system with no surface discharges. In addition, the EPA recommended that best management practice should be employed in the temporary storage, handling and transport of wastes such as milk solids and sludge in the wastewater treatment tanks, to avoid the emission of odours.

Air and odour emission predictions
With all mitigation measures in place, the maximum predicted concentrations at the worst affected receivers are shown in **Table 4**. Note in particular that odour emissions are indicated by the Hydrogen Sulphide concentration and not by the Odour Unit (**OU**) metric, which is for more complex mixtures of odourous air pollutants (these would not occur at the site).

Table 4 *–Incremental emissions at the worst affected receiver*

Emission	***Averaging period***	***Metric***	***Criteria***	***Prediction (% of Criteria)***
Nitrogen dioxide (NO_2)	*1-hour*	*µg/m^3*	*264*	*28.9 (11.7%)*
	Annual	*µg/m^3*	*62*	*0.6 (0.97%)*
Carbon monoxide (CO)	*15-min*	*mg/m^3*	*100*	*0.014 (>1%)*
	1-hour	*mg/m^3*	*30*	*0.01 (>1%)*
	8-hour	*mg/m^3*	*10*	*0.007 (>1%)*
Particulate matter (PM_{10})	*24-hour*	*µg/m^3*	*50*	*1.08 (2.16%)*
	annual	*µg/m^3*	*30*	*0.09 (>1%)*
Hydrogen Sulphide (odour)	*1 second (nose response)*	*µg/m^3*	*1.38*	*0.4 (>1%)*

The air emission predictions from the development at sensitive receivers are a very small fraction of the EPA's minimum air quality guidelines. The proposed development would have a relatively minor contribution to air quality at nearby receivers and the regional air-shed. In addition, the Department recognises that air quality impact predictions are inherently conservative. The data inputs for potential air emissions are based on theoretical maximums and the data inputs for background air quality are based on observed maximums. Therefore, the actual air quality impacts would generally be less than the predicted results.

Both the EPA and the Department are satisfied that the generation and fugitive release of air emissions and odours can be effectively managed with the built-in and operational odour controls proposed for the development, and with best management practice for handling waste. These measures will ensure the development does not result in unacceptable air quality and odour impacts on the nearest sensitive receivers, some 800m to the south and west.

Conclusion
The proposed facility has a number of built-in and operational air emission and odour controls such as low emission gas burners, refrigeration and a daily hygiene regimen for processing equipment. Both the EPA and the Department are satisfied that with these measures in place, the proposed facility would not lead to an off-site exceedance of air quality criteria, or indeed any unacceptable impacts at the nearest sensitive receivers, some 800m away.

MGC has committed to verify boiler emissions, and audit and odour management once the development is fully operational, which would allow for any unexpected air quality problems to be rectified. MGC will also be required to conduct annual compliance reviews and triennial independent compliance audits, in line with the Department's standard approval conditions. Both the EPA and the Department conclude that the overall potential for air quality impacts is limited and can be effectively managed with the approval conditions.

5.2 Other Issues

The Department's assessment of other issues is provided in **Table 5** below.

Table 5: *Assessment of other issues*

Issue	***Assessment***	***Recommendation***
Traffic	• The EIS was accompanied by a Traffic Impact Assessment and a Construction Traffic Management Plan, both prepared by Traffix (both in Technical Paper 7 to the EIS). • Daily operational traffic for the development would include: o 60 light vehicle trips (staff and visitors), generally outside of the morning and evening peaks owing to the 3 x 8 hour shift arrangements; and o 102 heavy vehicle trips, with 10 occurring during the morning peak hour and 16 during the evening peak hour. • The peak hour traffic for this proposal would be just 21% of the traffic generation that has been allowed for this site in the strategic planning for the Western Sydney Employment Area. • Traffic modelling shows that traffic from the development would be easily accommodated on the local road network without any reduction in intersection performance. • A swept path analysis shows that trucks can comfortably manoeuvre around the site as required. • Parking for 53 vehicles would be provided, which is ample to accommodate the staff and visitor parking demand on site. • Construction traffic would be managed according to the CEMP. • The Department is satisfied that the proposed development would have minimal traffic related impacts. Neither the RMS or Council had any traffic related comments or requirements.	Require the applicant to: • ensure driveways and parking to comply with AS 2890 and Austroads; and • restrict heavy vehicle queuing, parking and loading on public roads.
Noise	• The EIS included a Noise Assessment report, which was prepared by Todoroski Air Sciences Pty Ltd (see Technical Paper 5 to the EIS). • Construction noise sources would include trucks, rock hammers, cranes and other machinery, while operational noise impacts would be dominated by loading/unloading trucks at the delivery dock, and the break-out noise from the internal plant and machinery at the facility. • The maximum predicted construction noise impact is $L_{Aeq,15min}$ 45dB during the day at the Emmaus Village, which is the nearest and most sensitive of all receivers, 800m to the southeast of the site. The maximum predicted impact complies with the *Interim Construction Noise Guideline* (**ICNG**) day time criterion, which is $L_{Aeq,15min}$ 45dB. • In practice, construction noise impacts would be much less because most of the noisy construction work (i.e. earthworks) has already occurred under the preliminary works consents granted by Council. • The maximum predicted operational noise impact is 35dBA	Require the applicant to: • comply with PSNC and construction hours; • include construction noise management in the CEMP; and • prepare a Noise Management Plan (to be also included in the OEMP).

Issue	Assessment	Recommendation
	during the night period at the residence at 573 Mamre Road, which is 800m to the west of the site. The maximum prediction complies with the lowest possible *Industrial Noise Policy* (**INP**) criterion, which is 35dBA. • The Applicant has committed to include construction noise management in a CEMP and operational noise management in an Operational Environmental Management Plan (**OEMP**) for the development. • The Department is satisfied that these management plans would ensure construction and operational noise impacts would not exceed either the maximum predicted noise impacts in the Noise Assessment report, or the relevant noise assessment criteria in the ICNG and INP. • The EPA notes that construction and operational noise impacts are likely to be insignificant at any receiver and it recommends the inclusion of standard construction hours in the consent conditions. These hours are 7am to 6pm Monday to Friday, and 8am to 1pm Saturday. • The Department expects traffic noise impacts to be negligible because there are high volumes of traffic on roads in the vicinity of the site and relatively few traffic movements associated with the development. • The Noise Assessment report suggests a possible incremental increase in road noise of less than 0.1dBA due to the development, which will not be perceptible.	
Waste	• The EIS included a Waste Management Plan (**WMP**) prepared by KMH Environmental (Technical Paper 9 to the EIS). • An assortment of building and construction waste would be generated during construction of the development, which would be transported from the site to licenced waste management facilities in the area. • The Department would require an adequate process for classifying and removing the construction and building waste from the site. MGC has committed to document these things in the CEMP. • During operation, the main wastes produced at the site would be the wastewater from the clean in place hygiene system, and the milk solids that are captured and separated from the wastewater. • MGC proposes to install an on-site waste water treatment system, which would separate milk solids from the waste stream (for use as stock feed), and treat waste water to a standard that is suitable for disposal to sewer. • The system would be designed to operate according to water quality specifications from Sydney Water under a trade waste agreement. Sydney Water has indicated that there is adequate capacity in the existing sewerage network for the development. • Other operational wastes include plastic packaging and other miscellaneous factory wastes. The EPA recommended that MGC be required to prepare a final WMP, which includes details of the quantities and classifications of all waste expected from the site. • The Department is satisfied that waste will be appropriately managed at the site and has incorporated both MGC's commitments, and the EPA's recommendation for the final WMP in the recommended conditions.	Require the applicant to: • classify all waste generated at the site in accordance with the EPA guideline. • obtain a trade waste agreement from Sydney Water; and • prepare and implement a Waste Management Plan for the development.
Hazards	• The development includes storage of chemicals classed as Dangerous Goods (i.e. Class 5.1 and Class 8), which are primarily to be used in the "Clean in Place" hygiene system. • The storage volumes exceed the threshold criteria in *State Environmental Planning Policy No 33 – Hazardous and Offensive Development* and the development is therefore "Potentially Hazardous". • The EIS included a Preliminary Hazard Analysis (**PHA**)	Require the applicant to: • prepare and implement a suite of hazard and fire safety management plans for the

Issue	Assessment	Recommendation
	(Technical Paper 4 to the EIS), which identified 2 scenarios where it is possible for offsite impacts to occur (by way of the accidental release of toxic gas): o mixing chemicals within the hygiene system; and o release of ammonia from the chilled water system. • The PHA quantitatively analysed toxic gas releases using Ausplume (V6.0) dispersion modelling software. • The overall risk from the facility to surrounding land use meets the Department's risk acceptance criteria for a new development. Sensitive land uses would not be adversely impacted should any of the analysed hazard scenarios be realised. • The Department is satisfied that the project will not result in unacceptable risks for surrounding land uses. Nevertheless, to ensure that the facility will operate in a safe manner, a suite of hazard-related conditions of approval are recommended.	development in accordance with the Department's HAZOP guidelines.
Soil Contamination	• About 1500m^3 of hydrocarbon contaminated soil was uncovered in the south-western portion of the site during excavation work that occurred in 2011, under the subdivision approval granted by Penrith Council. • The contamination was described as a viscous material consistent with diesel petroleum hydrocarbon, which is likely to have originated from one of the former uses of the site such as the bitumen pre-mix plant that operated in association with the breccia quarry. • The contaminated soil was bio-remediated on the site and, once validated sampling indicated that all results were below the site assessment criteria, the material was blended with clean overburden and distributed across the site. • The EIS included both a copy of the 'Documentation of Remedial Works' report prepared by Environmental Earth Sciences after the remedial work had been complete, and a 'Preliminary Environmental Site Assessment' report prepared by Environmental Investigation Services for the proposed development (both part of Technical Paper 10 to the EIS). • Both reports indicate that the site is unlikely to yield any further contamination, and that it is presently suitable for the proposed development. • Notwithstanding, MGC has committed to implement an 'unexpected finds protocol' in the unlikely event that further contaminated material is uncovered. • The Department supports this approach and it has included an appropriate condition in the recommendation. The EPA has made not comment about soil contamination on the site.	Require the applicant to: • implement an unexpected finds protocol in event that further contamination is uncovered.
Stormwater	• The EIS included both: o a Soil and Water Management Plan for temporary construction stormwater, erosion and sediment controls, prepared by KMH Environmental; and o a Stormwater Management Strategy for stormwater infrastructure on the site, prepared by Pitt & Sherry. • Much of the temporary stormwater, erosion and sediment controls for the construction program have been installed under the preliminary works approvals granted by Council. • Notwithstanding, the SSD would approve additional external work (for paving, etc) and the ongoing management and augmentation of these temporary works will come under the SSD approval. The Department has included an appropriate consent condition for this to occur. • The permanent stormwater system has been designed to comply with Council's guideline and it features the following: o piped drainage for a 1 in 20 year event without flooding; o an on-site detention (**OSD**) cell to maintain pre-development	Require the applicant to: • comply with Section 120 of the POEO Act to prevent pollution of waters; and • prepare and implement a Stormwater Management Plan for the development in consultation with Council.

Issue	Assessment	Recommendation
	stormwater discharges for the 1 in 100 year event; and o a discharge point with flow-diffuser to the south of the site within the biodiversity corridor. The discharge does not require the removal of vegetation (other than grass) or the disturbance of riparian areas. • Under normal operation, stormwater collected from within the bunded area around the wastewater tanks would be directed to the stormwater discharge (via the OSD and pollutant trap). However, if effluent is detected by a sensor at the bund collection point, an operable valve will re-direct stormwater from the bund to sewer. • The EPA is satisfied with this approach, subject to its approval of the sensor/valve technology. If the sensor/valve cannot be shown to adequately prevent effluent discharge, then the bunded area could quite simply be covered and wholly directed to sewer. • The Department is satisfied with either approach, and with the performance specifications of all proposed permanent stormwater management infrastructure.	
Visual Amenity	• The EIS included a Visual Assessment Report by Urban Design and Architecture Pty Ltd (Technical Paper 8 to the EIS). • The proposed building is compliant with Council's 15m DCP height control. While the silos do not comply (i.e height is 19.5m), the nearest residence is 800m distant and would not suffer impact on any residential amenity or view corridor. • The proposed building is characteristic of the architectural vernacular found on nearby industrial lands. It would be seen to fit comfortably within a context of other large industrial buildings, although it would not be highly visible from any public area owing to its 175m setback from Quarry Road. • MGC has committed to landscaping in the street setback area, which includes a mounded area, plantings and public art. • The Department is satisfied that the proposed building and its landscaping would be positive visual contributions to the area's industrial character. Council has not provided any comment on visual impacts.	Require the applicant to: • prepare and implement a Landscape and Vegetation Management Plan; and • comply with the Department's standard conditions for signage, lighting and fencing.
Biodiversity	• The EIS included a Flora and Fauna Assessment prepared by Travers Bushfire and Ecology (Technical Paper 3 to the EIS). • The site is adjacent to remnant bushland in the bio-diversity corridor, which is habitat for Cumberland Plain Woodland and River-flat Eucalypt Forest (both Endangered Ecological Communities (**EEC**)), and potential habitat for the Cumberland Plain Land Snail (a threatened species). • The development includes some minor drainage work in the biodiversity corridor, but would not otherwise cause any direct impacts on its biodiversity values. • Notwithstanding, the development may be a potential source of indirect impacts collectively known as 'edge effects'. Impact mitigation measures for the development would include: o relocation of any snails in the vicinity of the stormwater outlet before construction work occurs; o implement *Phytopthera* minimisation protocols; and o weed control and rehabilitation of any disturbed areas; • With these measures, the Department is satisfied that biodiversity impacts of the proposed development would be negligible. The OEH stated that it did not wish to make any comments on the proposal.	Require the applicant to: • comply with all recommendations in the Travers Flora and Fauna Assessment; and • prepare and implement a Landscaping and Vegetation Management Plan.
Bushfire	• The EIS included a Bushfire Protection Assessment prepared by Travers Bushfire and Ecology (Technical Paper 2 to the EIS). • While devoid of vegetation, the site is immediately adjacent a bio-diversity corridor and consequently it is mapped as bushfire affected land. • Most of the proposed development provides a 20m Asset	Require the applicant to: • comply with all recommendations outlined in the Travers Bushfire

Issue	Assessment	Recommendation
	Protection Zone from the vegetation in the biodiversity corridor. • However, parts of the milk receival canopy, and energy centre are exposed to potential flame zone attack. These buildings would be installed with additional construction treatments such as non-combustible materials, metal mesh screens on any operable window and weather strips on exposed external doors. • Notwithstanding, an adequate water supply for fire fighting, and a defendable space around all buildings would be provided. • The Department is satisfied that the development would comply with the *Planning for Bushfire Protection 2006*.	Protection Assessment.
Greenhouse Gas	• The development is predicted to emit a total of 36,046 tonnes of CO2-e per annum which would be Scope 1 and 2 emissions from electricity use and gas combustion in the boilers. • Proposed energy efficiency measures at the facility include heat recovery in the pasteuriser (which includes heat recovery in the clean in place hygiene system) and high efficiency gas boilers. • The Department is satisfied that the GHG emissions of the project would be acceptable and recommends the energy and greenhouse gas savings measures should be included in a management plan.	Require the applicant to: • prepare and implement an Energy Efficiency and Greenhouse Gas Reduction Plan for the development.
Aboriginal Heritage	• The site is highly disturbed and the Department therefore considers it highly unlikely that the proposed development would have any cultural heritage impact. • The Department has a standard condition for an 'unexpected finds protocol', which should, nevertheless, be implemented during construction.	Require the applicant to: • implement the Department's standard 'unexpected finds protocol'.
Contributions	• A development contribution of $180,000 per developable hectare applies to land within the *State Environmental Planning Policy (Western Sydney Employment Area) 2011*. • A similar amount has already been paid in respect of the site by the developer responsible for the subdivision creating the lot. • Therefore, a Satisfactory Arrangements Certificate has been issued for the development by the Department's Executive Director, Strategy and Infrastructure Planning (**Appendix E**).	• No conditions necessary.

6. CONCLUSION

The Department has assessed the proposed development in accordance with Section 79C of the Act, which means it has taken into consideration:

- the environmental, social and economic impacts of the proposed development;
- relevant environmental planning instruments;
- submissions on the proposed development;
- the suitability of the site; and
- the public interest.

The assessment found that the proposed development could be carried out with an acceptable level of environmental performance with the implementation of MGC's proposed environmental management and mitigation measures, and the Department's recommended conditions of consent. In particular, the development would comply with all relevant criteria for air, odour and noise emissions.

The facility would create 45 full time equivalent jobs. It would add value to raw milk produced by dairy farms in NSW and allow MGC to fulfil its 10 year agreement without the need to transport bottled milk from interstate. It is directly in-line with Goal 1 of *NSW 2021,* which is to improve the performance of the NSW economy by way of growing business investment, growing the value of primary industries, and growing employment. It also strongly correlates with the aims of the draft

Metropolitan Strategy for Sydney to 2031, which are to support jobs growth in manufacturing on employment lands in the Western Sydney Employment Area.

Therefore, the Department considers that the proposed development is in the public interest and should be approved subject to conditions.

7. RECOMMENDATION

It is recommended that the Executive Director, Development Assessment Systems and Approvals:

- **consider** the finding and recommendations of this report;
- **approve** the development application under section 89E of the EP&A Act 1979; and
- **sign** the development consent attached at Appendix A.

David Mooney
Senior Planner

13/12/13.

Chris Ritchie
A/Director
Industry, Social Projects & Key Sites

17.12.13

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Executive Director
Development Assessment Systems & Approvals