

ASSESSMENT REPORT

Section 75W Modification Cargill Beef Abattoir – Low Irrigation Area

1. BACKGROUND

The Cargill Beef Abattoir is located about 5 kilometres (km) north north-east of the Wagga Wagga township, in the Bomen Industrial Estate, Wagga Wagga local government area (see Figure 1).

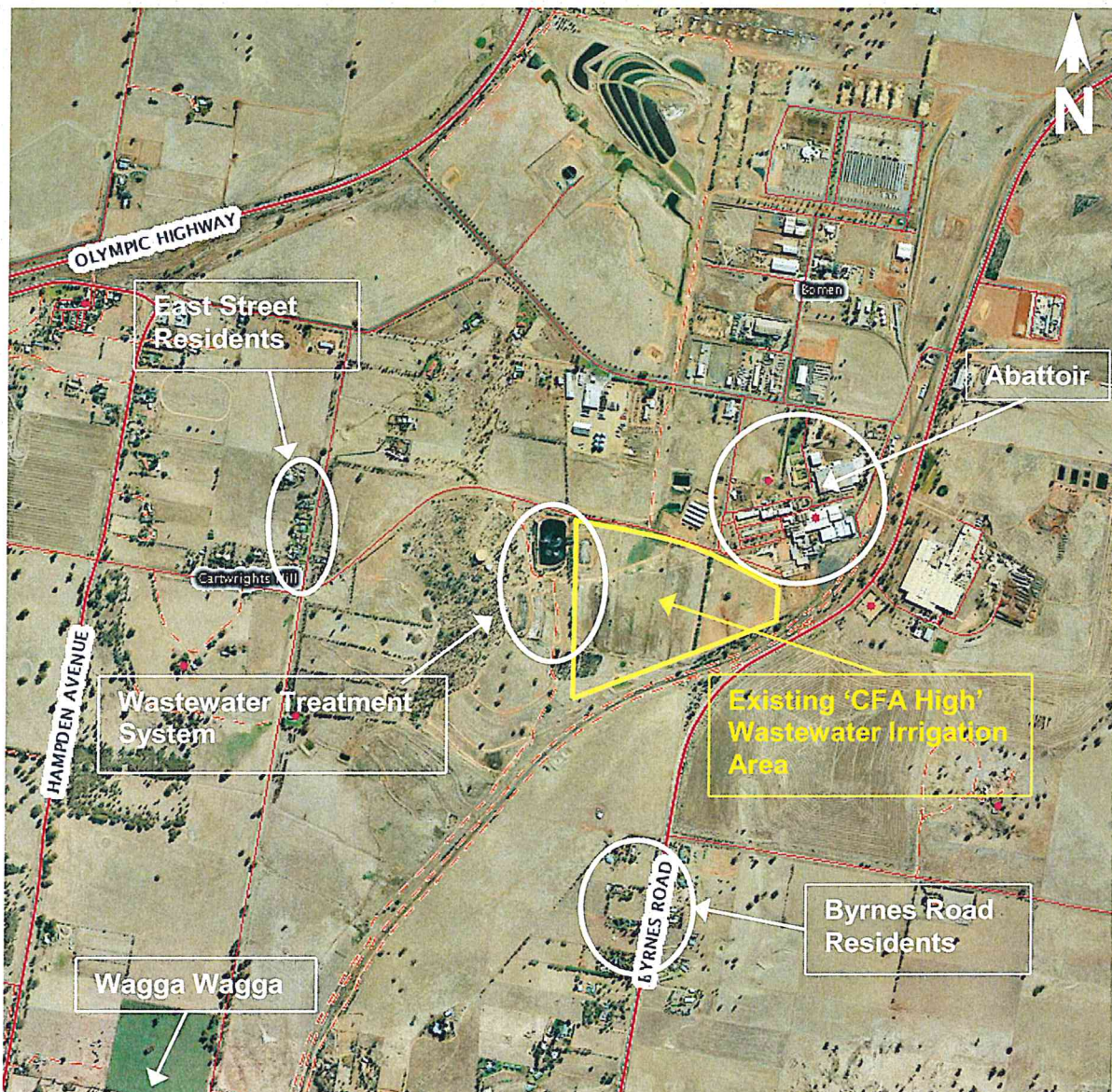


Figure 1: Site Location

The abattoir was established in the late 1940s and is currently operated by Cargill Beef Australia (Cargill).

The abattoir is surrounded by rural residential and industrial land uses. The nearest residents are located approximately 600m from the existing wastewater treatment system (currently being upgraded), on East St at Cartwright Hill and on Byrnes Road, approximately 500m south of the existing irrigation area (see Figure 1).

In 2003, the then Minister for Planning approved a development application (DA 220-07-2002-i) to upgrade and expand the abattoir. This approval allowed Cargill to increase the processing capacity from 850 to 2000 cattle per day and improve odour and effluent management practices.

The consent has since been modified a number of times in:

- 2003, to amend the footprint and layout of the facility;
- 2004, to modify the remediation works to be undertaken on-site; and
- 2009, to upgrade the wastewater treatment and biogas collection system to address on-going odour and waste management issues at the site.

Cargill currently discharges the majority of its effluent wastewater from meat processing operations into Council's Sewerage Treatment Plant (STP) at Bomen, while some wastewater is applied to an existing on-site irrigation area approximately 10 hectares in size known as the CFA High area (see Figure 1).

During the assessment of the 2009 modification, the sites existing wastewater treatment system (see Figure 1) failed resulting in downstream impacts on Wagga Wagga City Council's (Council) STP at Bomen (see Figure 2).



Figure 2: Failure of Council's Sewerage Treatment Plant Due to Cargill's Untreated Wastewater

As a result, the Office of Environment and Heritage (OEH) imposed a pollution reduction program (PRP) requirement on the licence for the facility to manage odour and effluent. The Department also issued Cargill a notice of intention to give an order on 4 June 2009 under section 121B of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Department issued this order to ensure Cargill was committed to a process of bringing the facility into compliance, particularly in regards to odour generation, wastewater management and general compliance with the development consent.

In 2010, the consent for the site was again modified. Plans for the approved 2009 wastewater treatment system upgrade were revised as a result of continued work between the Department and OEH on the Department's order and OEH's PRP. In particular the revised plans included:

- replacing ponds 1 and 2 with two new covered anaerobic ponds, each with a working capacity of 29ML;
- a biogas collection and enclosed gas flare system;
- refurbishment of pond 3 to install a Biological Nutrient Removal System (BNR);
- installation of a dewatering system to process the waste activated sludge from the BNR; and
- reducing the processing capacity of the abattoir (from 2000 to 1600 cattle a day), to reflect the capacity of the new wastewater treatment system.

This modification was known as the Cargill Effluent System Upgrade (ESU, see Figure 3).

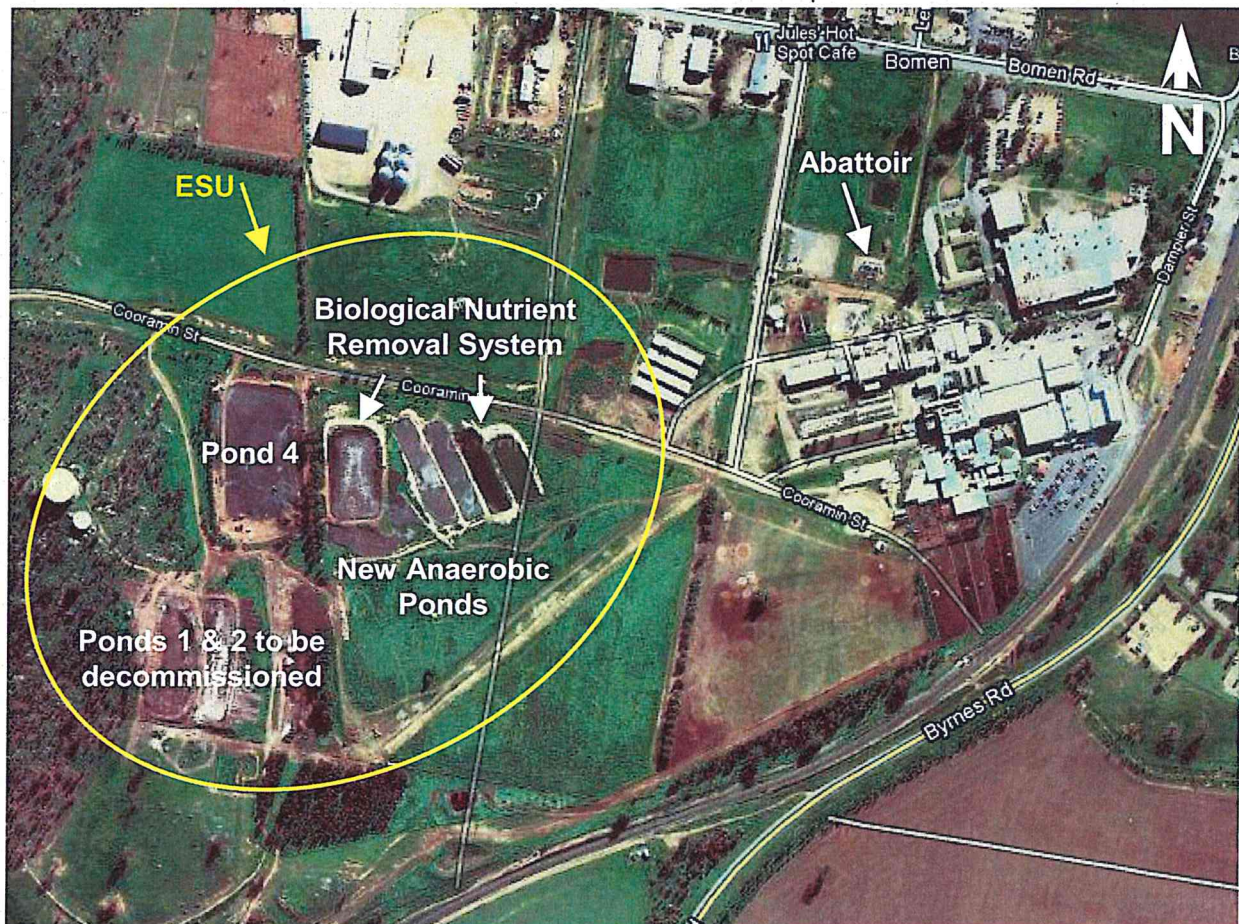


Figure 3: Proposed Effluent System Upgrade (ESU)

Cargill is currently on track to deliver the ESU with the final stage (commissioning of the BNR system) scheduled for completion on 20 November 2011, consistent with both the OEH's PRP and the Department's order.

The ESU is expected to significantly improve odour emissions from the site as well as the quality of effluent wastewater applied to Cargill's existing irrigation area and discharged into Council's STP, meeting the required Trade Waste Acceptance limits.

2. PROPOSED MODIFICATION

Cargill is now seeking to modify its existing consent to allow:

- the irrigation of 300 mega litres (ML) per year of wastewater to occur on an additional parcel of land on-site, separate from that previously approved (see Figure 4);
- construction of a water interception trench on the southern and western boundaries of the proposed irrigation area to protect down-slope areas from natural runoff of irrigated wastewater (see Figures 5&6);
- construction of a pump station and pipe from the ESU to the proposed irrigation area (see Figure 5); and
- installation of a wind sock on the proposed irrigation area (see Figure 4).

This proposed irrigation area would be known as the Cargill Low area (see Figure 4).

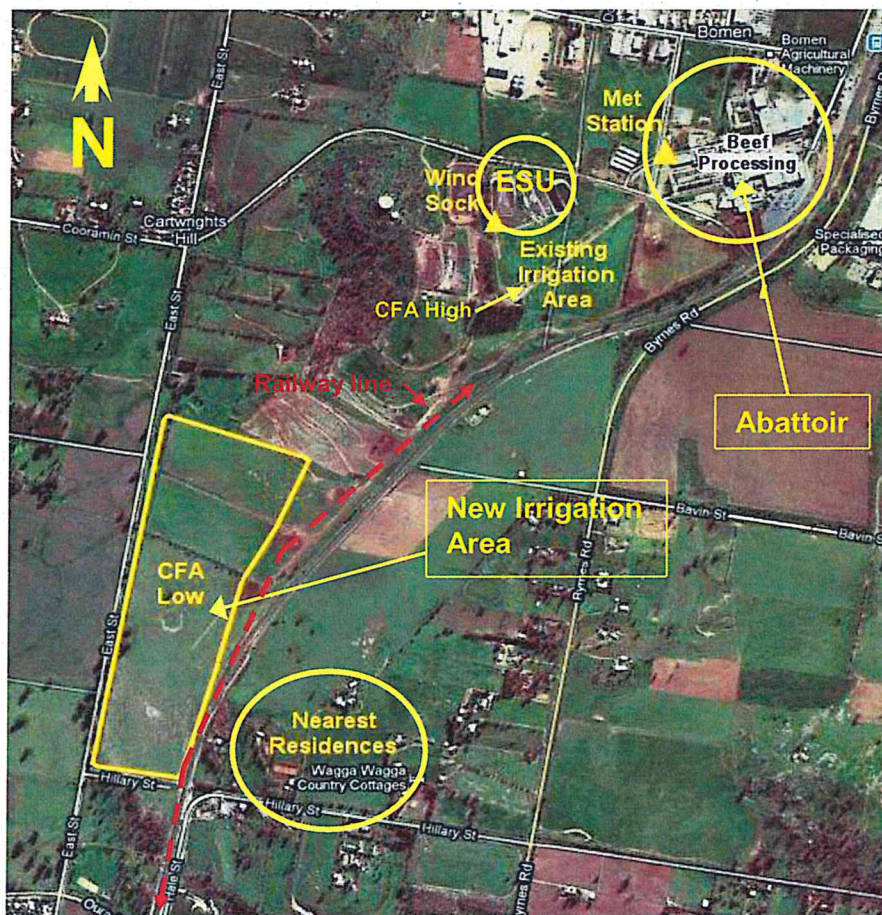


Figure 4: Cargill's proposed additional irrigation area

The interception trench would drain into an excavation located in the south west corner of CFA Low area, with a proposed volume of 0.5 ML (see Figure 5).

The CFA Low area has an area of approximately 30 hectares (28 of which is suitable for irrigation purposes) and would be irrigated with treated effluent from the new treatment system following the completion and effective operation of the ESU and continuing thereafter.

The wastewater would be pumped from the ESU to the irrigation area via pipes (150mm) where it would be applied by sprinkler to the land (see Figure 5).

The Cargill Low area has been part of the abattoir site since it was purchased in 1991 and has predominantly been used for grazing since that time. However, the site has previously been approved for irrigation purposes by Wagga Wagga City Council (Council) in 1998. The land

was subject to some irrigation between 1998 and 2000, however, this consent has since lapsed.

The nearest residences to the CFA Low area (3 residences) are located approximately 60m to the south-east of the site on Hillary Street, across Hale Street (see Figures 4&5).

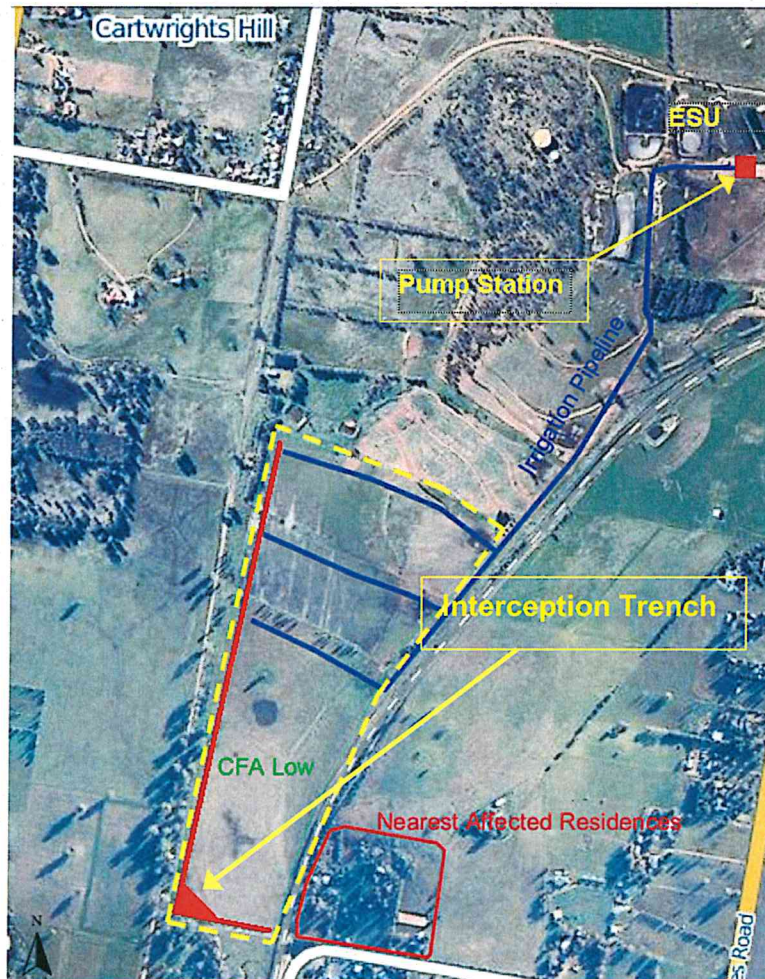


Figure 5: Cargill's proposed pump station, irrigation pipe and interception trench

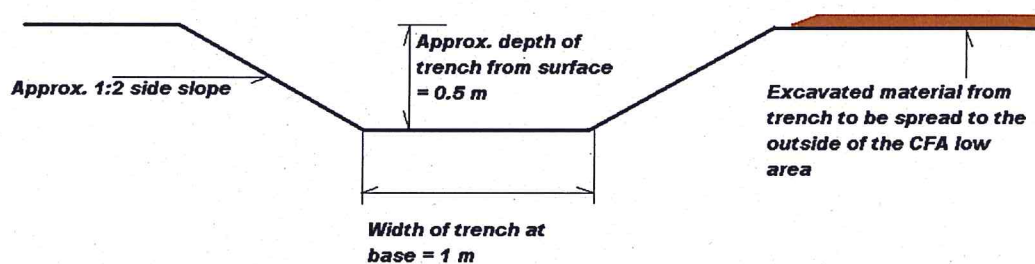


Figure 6: Approximate dimensions of proposed interception trench

3. STATUTORY CONTEXT

Approval Authority

The Minister was the approval authority for the original project approval, and is consequently the approval authority for this application. Under clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000*, the Minister's consent is taken to be an approval under Part 3A of the EP&A Act and can be modified by the Minister under section 75W of the EP&A Act.

On 25 January 2010, the Minister delegated his powers and functions as an approval authority to modify certain project approvals under section 75W of the EP&A Act to the Executive Director of Major Projects Assessment (Executive Director). This modification application meets the terms of this delegation, consequently, the Executive Director may determine the application under delegated authority. The Minister for Planning and Infrastructure has confirmed this delegation subject to the local Council not objecting to the proposal.

As Wagga Wagga City Council has removed their original objection to the proposal (see 'Consultation' in section 4 below), the Department is satisfied that the Executive Director may determine the application under delegated authority on this occasion.

Section 75W

Section 75W of the EP&A Act confers on the Minister an implicit obligation to be satisfied that the modification request falls within this section of the EP&A Act.

The Department notes that:

- the primary function and purpose of the approved facility would not change as a result of the proposed modification; and
- any potential impacts would be minimal and appropriately managed through the existing or modified conditions of consent.

Therefore, it is considered that the proposed modification is within the scope of section 75W of the EP&A Act. Consequently, the Department considers that the application should be assessed and determined under Section 75W of the EP&A Act rather than requiring a new development or project application to be lodged.

4. CONSULTATION

Under Section 75W of the EP&A Act, the Minister is required to make the application publicly available on the Department's website. Upon receipt, the application was placed on the Department's website and following a review of the application, the Department did not believe formal public notification of the application was necessary. Notwithstanding, the Department sought comments from Wagga Wagga City Council (Council), the Office of Environment and Heritage (OEHS) and the NSW Office of Water (NOW).

Council originally objected to the proposal because the proposed irrigation area is below the 1:100 Annual Recurrence Interval (ARI) flood level and the 0.5m high control berms initially proposed to alleviate flood inundation on the site would have an unknown effect on flood waters and adjoining properties, reducing the size of the floodplain.

However, Cargill and Council subsequently attended a meeting together on 25 July 2011 to resolve these issues. As a result, Cargill committed to the construction of stormwater interception trenches rather than the control berms so that the proposal would not reduce the size of the floodplain or increase the risk of adjacent properties being flooded.

Council is satisfied that this measure would be an effective solution to this problem and has since removed their objection to the proposal. Council has confirmed this in writing.

OEH did not object to the proposal provided that careful management practices are employed at the site to ensure the irrigation is sustainable and does not impact on surface and groundwater systems.

NOW did not object to the proposal and recommended conditions regarding groundwater monitoring.

In addition to the Department's consultation, Cargill has undertaken its own consultation with neighbouring residents in relation to the proposed modification (e.g. residents on Byrnes Road, Hillary Street, East Street and Cooramin Road). This included the provision of monthly newsletters to neighbouring residents and a community information session which was held on site on 17 March 2011 where additional discussion regarding the proposed modification took place.

5. CONSIDERATION

The Department has assessed the application on its merits and considers the key environmental issues to be soil and water and air quality (see sections 5.1 and 5.2 below). Further, the Department's conclusions of the assessment of all other issues are provided in section 5.3 below (see Table 2).

5.1 Soil and Water

The key issue in relation to potential impacts on water relates to the quality of wastewater irrigated and the potential for soil contamination (including off-site contamination during flood events) as a result of untreated or poor quality wastewater.

Wastewater

Following the completion of the ESU, wastewater streams from the beef processing facility would be treated using primary treatment processes to reduce concentrations of organic material, oil and greases, paunch material and gross and suspended solids prior to being processed in the covered anaerobic ponds, BNR system and equalisation pond. The treated wastewater would then be irrigated onsite, or directed to Council's sewerage treatment plant (STP).

Although average slaughter rates at the site are generally around 1250 head of cattle a day, at maximum capacity (1600 head of cattle a day) the facility would produce up to 600ML of wastewater a year, requiring discharge to Council's STP or utilisation as water for irrigation.

Cargill currently have approval to irrigate 40ML of wastewater per year on the existing CFA High irrigation area and are proposing to irrigate a further 300 ML of wastewater a year on a new site known as the CFA Low area (see Figure 4).

This means that at peak production the abattoir would discharge 260ML of wastewater a year to Council's STP and use 340ML a year for irrigation purposes.

Notwithstanding, under their current Trade Waste Agreement (TWA) with Council, Cargill can discharge in excess of their total annual wastewater production volume solely into Council's sewer, with a limit of 830ML a year. Cargill has applied to extend their TWA with Council for the period after 30 October 2011 and following commissioning of the ESU. The new TWA would have the same (or a similar) annual wastewater disposal limit (i.e. 830ML a year).

OEH generally consider wastewater to be a resource available for utilisation, rather than a waste requiring disposal, as long as it is undertaken in accordance with the OEH's environmental guideline *Use of Effluent by Irrigation* (2004).

Table 1 below compares the predicted quality of the wastewater effluent to be irrigated from the new wastewater treatment system against the OEH guideline values.

Table 1: Predicted wastewater quality for irrigation

Parameter	Predicted Concentration (mg/L)	OEH's Use of Effluent by Irrigation (2004) - Classification of Effluent for Environmental Management
Total Chemical Oxygen Demand	<150	-
Biochemical Oxygen Demand (BOD) ₅	<20	Low (<40)
Total Suspended Solids	300	-
Oil and Grease	<10	Low (1,500 considered High)
Total Dissolved Solids	2000	High (>1,000 – 2,500)
Total Nitrogen	<50	Low (<50)
TKN	<50	-
NH ₃ -N	<35	-
Total Phosphorus	10	Medium (10 - 20)
Sulphate	<50	-
Sulphide	1	-
pH	7.0 – 9.0	Generally acceptable (limited corrosion potential)
Colour	No colour	-

Table 1 indicates that predicted quality of wastewater to be irrigated would generally meet the low to medium strength classification for nutrient values in this guideline. The Department is therefore satisfied that the expected quality of wastewater is suitable for irrigation purposes. In addition, the Department is satisfied that suitable contingency measures are in place to dispose of all wastewater into Council's sewer via a TWA in the unlikely event that irrigation ceases at the site.

It is important to note that the predicted wastewater quality loading rates in Table 1 would be dependent on the new wastewater treatment system consistently producing high quality effluent. Therefore, any consent to irrigate on the proposed irrigation area would be conditional on completion of the ESU and the effective operation of the new wastewater treatment system (see conclusion below).

Flooding

The proposal presents a risk in relation to the potential for off-site contamination, particularly in relation to the potential for irrigated wastewater run-off into the nearby Murrumbidgee River during flood events.

The proposed irrigation area is relatively flat with no major slope and topographical contours generally ranging from 177.0 to 177.5m Australian Height Datum (AHD). The site is located in the 'High Hazard Floodway' according to Council's 'Floodplain Risk Management Plan'.

Based on previously recorded flood levels contained within this plan, Cargill concluded that the proposed irrigation site is likely to be inundated in less than a 10 year Annual Recurrence Interval (ARI) flood event.

Further, although flood levels less than the 10 year ARI height are generally not considered in flood planning instruments, Cargill concluded that it is highly likely that the proposed irrigation site would be inundated in events more frequent than the 1 in 5 year ARI storm event.

Despite this, Cargill has indicated that it is highly unlikely that the CFA Low area would be irrigated in any kind of rainfall event. Cargill maintains a meteorological weather station on the site (to the west of the beef processing facility, see Figure 3) which records temperature, humidity and precipitation (as well as wind speed and direction) and relays the data back to the environmental manager's office on-site. This allows the environmental manager and the irrigation operator to remain in constant communication and determine when the possibility of a rainfall and/or flooding event is likely.

The OEH's *Use of Effluent by Irrigation* (2004) state that sites prone to flooding can be suitable for effluent irrigation, but only where effluent storage facilities and other equipment such as pumps are adequately protected. The proposed pumping station for irrigation would be located up the hill adjacent to the ESU approximately 850m to the north-east of the CFA Low area (see Figure 5).

Given that irrigation infrastructure would be protected from flood events, the quality of irrigated wastewater would be high, and that it is highly unlikely that the CFA Low area would be irrigated in any kind of rainfall event, the Department is satisfied that the proposal is consistent with the OEH's guideline in relation to irrigation on flood prone land. The OEH did not raise any issues in relation to flooding.

As mentioned above, Council did not initially support the application because the proposed irrigation area is below the 1:100 ARI flood level and because of the unknown effect of above-ground structures (i.e. the originally proposed 0.5m control berms) on flood waters and adjoining properties, reducing the size of the floodplain.

However, in response to Council's concerns, Cargill has now committed to the construction of stormwater interception trenches (rather than control berms) to alleviate flood inundation on the site without acting as an impediment to the size of the floodplain or increasing the flood risk to adjacent properties. In addition, it was considered that the interception trench would provide adequate mitigation against the escape of potential contaminants from the irrigation area.

Council is now satisfied the proposed interception trench would resolve its concerns. Council has since removed their objection to the proposal and confirmed this in writing.

Soil

The key issue in relation to potential impacts on soil relates to the capacity of the soil in the new irrigation area to absorb nutrients and organic materials contained within the irrigated wastewater. This would ensure sustainable soil quality and growth of the Lucerne crop located on this parcel of land, throughout the life of the project.

Irrigated wastewater would contain a range of nutrients, including nitrogen, phosphorus, sodium, salts and a range of other organic materials.

A detailed soil assessment was undertaken by Cargill in accordance with the OEH's *Use of Effluent by Irrigation* (2004), including soil sampling, to assess the suitability of the soil for effluent irrigation.

Based on land application of 300ML of wastewater per year, Cargill's assessment found that there would be a phosphorus capacity of 76 years in the soil on the proposed irrigation site. In addition, the assessment concluded that:

- the irrigation would not add excess nitrogen to the soil (reaching approximately 79% of the soils annual nitrogen capacity);
- the proposed mass of organic material to be applied to the site would be minor at 3% of its sustainable mass;
- salinity levels would be well below the 2.0 dS/m level (at 0.2 dS/m); and

- the sodium absorption rate of the soil is low with a pH in the normal range.

OEH generally supported the proposal but noted that their ongoing support would be contingent upon careful management to ensure that the proposed irrigation is sustainable and does not impact on surface and groundwater systems.

In particular, OEH noted that the nutrient balance for soils on the irrigation site would constantly change throughout the life of irrigation activities, especially after flooding events. OEH also noted that wastewater salinity would need to be very carefully managed as effluent irrigation with high concentrations of salt would reduce crop yield.

Cargill has committed to undertaking careful monitoring of the soil (and water) properties of the site throughout the life of irrigation activities to ensure a sustainable soil quality is maintained and growth of the existing Lucerne crop continues. These practices would be formalised in a revised Effluent Management Plan for the site (see conclusion below).

Cumulative Impacts

As noted by Cargill, there is no evidence to suggest that cumulative impacts on soil or water would result from modified operations given the existing CFA High irrigation area and proposed irrigation area are located approximately 700m apart (see Figure 4) and separated by existing water control berms.

Conclusion

In order to ensure careful management of potential soil and water impacts of the proposed modification, the Department has recommended a number of conditions of consent, including the requirement for Cargill to:

- refrain from irrigating on the CFA Low area until the ESU is completed and producing high quality effluent;
- refrain from irrigating on the CFA Low area in likely flooding events; and
- prepare a revised Effluent Wastewater Management Plan for the site in consultation with NOW and OEH, prior to undertaking any irrigation on the CFA Low area.

In particular, the revised Effluent Wastewater Management Plan would require Cargill to:

- ensure effluent would be treated and managed in accordance with OEH's guideline/s;
- identify the irrigation area and include detailed baseline data on the existing soil, surface and groundwater conditions;
- provide a detailed description of the irrigation system;
- identify the impact assessment criteria and monitoring strategy to be implemented; and
- identify the contingency measures that would be implemented in high rainfall events (e.g. full discharge of wastewater into Council's sewer under a TWA) and/or should impacts occur.

The Department is therefore satisfied that with the above conditions in place, the potential soil and water impacts of the proposal can be adequately monitored and managed to ensure the impact of irrigation on the site is sustainable and would not result in any adverse environmental impacts.

5.2 Air Quality

Odour

Residual odour is an existing and ongoing issue for the abattoir facility as a whole.

The ESU approved as part of the 2010 modification is expected to significantly improve odour emissions from the site with the final stage (commissioning of the BNR system) scheduled for

completion on 20 November 2011. Nonetheless, the facility would still generate some odours from the proposed wastewater management system (ESU) including:

- the biogas handling system for the 2 covered anaerobic ponds;
- fugitive emissions from the decommissioning of ponds 1 and 2;
- the waste activated sludge management system for the Biological Nutrient Removal System; and
- sludge removal from the new anaerobic ponds.

Cargill's Annual Environmental Manage Report 2010 (AEMR) identified that 7 odour related complaints had been received during the reporting period, down significantly from 37 complaints received in the previous reporting period, thereby providing some initial indication of the effectiveness of ESU in reducing odour at the site. The AEMR indicates that majority of these complaints were caused by odour associated with the construction of the ESU (e.g. decommissioning of the old wastewater treatment ponds).

Further, as construction works are still being carried out on the ESU, the Department expects that odour emissions at the site would continue to improve and the number of odour related complaints received would continue to reduce over future reporting periods.

Based on the OEH's *'Approved Methods for the Modelling and Assessment of Air Pollutants in NSW' (2005)* Cargill's EA recommended an odour performance criterion of 6 (<10 residences) or 7 (<2 residences) odour units (OU) for sparsely populated areas such as the CFA Low area.

Cargill's EA concluded that based on previous odour assessments of wastewater with a Biochemical Oxygen Demand (BOD) level of <20 mg/L, the odour level of the wastewater is likely to be less than 6 OU, therefore would comply with the relevant OEH odour performance criteria for the CFA Low area.

Despite this, the Department has consulted with OEH and is of the opinion that a more appropriate odour performance criterion for the CFA Low area would be 4 OU consistent with the criteria applied to the broader abattoir site.

Odours generally begin to become a problem in wastewater with a BOD of >200 mg/L.

As above, the wastewater produced by the ESU is predicted to have a BOD 20 mg/L. At this low level, odour from irrigated wastewater is expected to be negligible as there would not be significant anaerobic breakdown of the organics in the wastewater which is the usual source of the most severe odours from wastewater.

Therefore, both the Department and OEH are satisfied that the odour performance criterion of 4 OU would be achieved by the modified facility.

The OEH consider that the current Environmental Protection License (EPL, no. 2262) conditions are sufficient to regulate the proposed activity and proposed no additional conditions in relation to odour.

Both the EPL and the existing consent for the site currently contain conditions requiring Cargill to undertake Odour Impact Assessment and air quality verification following the completion of the ESU in order to demonstrate compliance with the odour performance criteria of 4 OU.

These conditions require Cargill to implement contingency measures in the event that of non-compliance with the 4 OU odour performance criteria is identified. The OEH has indicated that this may involve a range of actions such as the requirement for Cargill to implement measures to further improve the quality of effluent wastewater at the site or divert all wastewater produced directly into Council's STP for processing.

The Department has recommended a minor change to the existing air quality verification condition in Cargill's consent to include verification of cumulative odour emissions from the site. Cargill would also be required to revise the Odour Management Plan for the site in response to any contingency measures required following the results of air quality verification.

Notwithstanding, given that the CFA Low area is separated from the existing CFA High irrigation area (700m north-east), the ESU (850m north-east, see Figure 3) and the existing beef processing facility (1km north-east, see Figure 3), cumulative odour impacts from the irrigation of such high quality wastewater (BOD 20 mg/L or less) together with the existing operations on-site are expected to be negligible and comply with the 4 OU criteria.

Control of Spray Drift

Cargill's also has a program for ensuring that there is no spray drift onto adjoining properties. The control of odours would be complimented by Cargill's spray drift control practices as they would ensure that irrigation is not carried out when strong wind is blowing in the direction of nearby sensitive receptors.

Irrigation would only be carried out on the site with a trained operator on-site. The operator would check the existing wind sock adjacent to the ESU (see Figure 3) and the one to be installed on the CFA Low area to determine the direction of the wind.

As above, Cargill also maintains a meteorological weather station on the site which records wind speed and direction (among other parameters) and relays the data back to the environmental manager's office. This allows the environmental manager and the irrigation operator to remain in constant communication and determine when the wind is too strong or in a direction that would impact on any nearby residences.

Dust

Irrigation of the CFA Low area would not generate dust, conversely, the wetting of soils on the site with irrigated wastewater is likely to prevent dust.

Some dust is expected to be generated during the installation of irrigation pipelines, cutting and bailing of Lucerne, planting and other cropping activities. However, these activities would all be temporary and intermittent in nature and are expected to have a minimal (if any) impact on nearby residences.

Conclusion

Both OEH and the Department are satisfied that the air quality impacts of the modified facility would be minimal and can be adequately managed by the implementation of careful management practices, existing EPL conditions and modified conditions in Cargill's existing development consent.

5.3 Other Issues

Table 2 - Summary of other impacts

Issue	Consideration	Recommended conditions of approval
Noise	<ul style="list-style-type: none"> The nearest residences to the CFA Low area (3 residences) are located approximately 60m to the south-east of the site on Hillary Street, across Hale Street (see Figure 4). Given the minor nature of works and that the site is relatively remote from residences, noise levels were not predicted as part of the EA. Some noise is expected during construction (e.g. excavation of the water interception trenches). However, no rock breaking or other particularly noise intensive equipment would be used on-site. Construction would be short-term over two months with noisy activities 	<ul style="list-style-type: none"> Manage through existing conditions of consent.

Issue	Consideration	Recommended conditions of approval
	<p>completed in less than 20 days.</p> <ul style="list-style-type: none"> Overall, noise impacts are expected to be negligible given existing road and rail traffic noise on both Hillary and Hale Street which separates the site from the nearest residences (see railway line running adjacent to Hale Street in Figure 4). Operational noise (e.g. from sprinklers) is expected to be inaudible from the nearest residences. Both Council and OEH did not raise any issues in relation to noise. The Department is therefore satisfied noise impacts would be negligible. 	
<i>Cultural Heritage</i>	<ul style="list-style-type: none"> Archaeological surveys were undertaken for the abattoir site as part of the original Environmental Impact Statement (EIS) for the abattoir in 1997 and concluded that there would be no impediment to development on the proposed irrigation area. In 2010, during construction of the ESU (2010 modification), an artifact (a brown silicate grindstone) was found at the highly disturbed site of the ESU, approximately 850m north of the proposed irrigation area (see Figure 4). Cargill notified the OEH and the grindstone was safely handled subject to a Care Agreement in accordance with the <i>National Parks and Wildlife Act 1974</i> issued to Wagga Wagga Local Aboriginal Land Council. The site has previously been used for irrigation and there is no indication that similar artifacts are likely to be present on the proposed irrigation area. The Department considers that it is unlikely that any artifacts are likely to be present on the site or would be disturbed during construction of the irrigation pipeline or interception trenches. Notwithstanding, there are existing conditions in place to deal with any unexpected isolated artifact finds/deposits. The OEH did not raise any issues in relation to cultural heritage. The Department is satisfied that the proposed modification would not result in any cultural heritage impacts. 	<ul style="list-style-type: none"> Manage through existing conditions of consent which require Cargill to cease works and notify the relevant government agencies should any Aboriginal relics be uncovered during construction.
<i>Greenhouse Gas</i>	<ul style="list-style-type: none"> Cargill's EA concluded that disposing of wastewater via irrigation generates less GHGs than disposal at Council's STP. This is primarily because of the increased power needed to process the wastewater at Council's STP. The Department is therefore satisfied that the proposed modification would help to reduce GHG emissions at the site. 	<ul style="list-style-type: none"> Manage through existing conditions of consent.
<i>Flora and Fauna</i>	<ul style="list-style-type: none"> The proposed irrigation area consists of and is surrounded by predominantly cleared rural land and pasture grasses. The Department is satisfied that the impacts of the proposed modification on flora and fauna would be negligible. 	<ul style="list-style-type: none"> Manage through existing conditions of consent.
<i>Hazards and Risk</i>	<ul style="list-style-type: none"> No hazardous materials would be stored on the proposed irrigation area. The Department is satisfied that the proposed modification would not increase hazards or risk. 	<ul style="list-style-type: none"> Manage through existing conditions of consent.
<i>Visual Impact</i>	<ul style="list-style-type: none"> The Department considers that the visual impacts of the proposed modification would be minor given the rural and agricultural context of the site. 	<ul style="list-style-type: none"> Manage through existing conditions of consent.

6. CONCLUSION

The Department has assessed the merits of the project in accordance with the requirements in Clause 8B of the EP&A Regulation. This assessment has found that the proposed modification is unlikely to cause any significant environmental impacts and is consistent with the approved development.

The proposed modification would:

- have minimal additional environmental impacts relative to the original development consent;
- reduce the volume of wastewater sent to Council's STP;
- reduce the burden on Council's STP to treat wastewater from the abattoir's meat processing operations; and
- reduce greenhouse gas emissions.

Consequently, the Department considers the proposed modification should be approved subject to conditions.

7. RECOMMENDATION

It is RECOMMENDED that the Executive Director, Major Projects Assessment:

- consider the findings and recommendations of this report;
- determine that the proposed modification is within the scope of section 75W of the EP&A Act;
- approve the proposed modification under section 75W of the EP&A Act; and
- sign the attached notice of modification.

Felicity Greenway
28/9/11

Felicity Greenway
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