

# Statement of Reasons

## WELLARD RURAL EXPORTS – INTEGRATED LIVE EXPORT FACILITY LIVINGSTONE

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### PROJECT

The Integrated Live Export Facility (ILEF) proposed by Wellard Rural Exports involves the establishment of a beef cattle pre-quarantine export facility at Livingstone, approximately 35 km south-south east of Darwin and 7 km west of Berry Springs.

The proposed facility, located at 2658 Stuart Hwy, Livingstone, will include the construction of the following infrastructure:

- pre-export quarantine (PEQ) holding yard
- feedlot for holding stock for longer than 30 days
- effluent storage/treatment ponds, contingency ponds
- compost / manure storage pads
- irrigation area for treated waste water reuse and hay / fodder production
- livestock truck washing facility and weighbridge
- caretakers house, office and staff ablution facilities, access roads and parking facilities
- commodity and fodder storage sheds, feedmill and freshwater storage
- hospital and isolation pens

The life of the development is expected to be greater than 40 years.

The Proponent submitted the Notice of Intent (NOI) for the Integrated Live Export Facility to the Northern Territory Environment Protection Authority (NT EPA) on 19 March 2015 for consideration under the *Environmental Assessment Act* (EA Act).

### CONSULTATION

NT EPA staff have reviewed the NOI in consultation with Northern Territory Government (NTG) advisory bodies, as required by clause 8(1) of the Environmental Assessment Administrative Procedures.

### JUSTIFICATION

The NT EPA has considered the NOI and decided that the project presents significant risks to the environment, most notably, impacts to community amenity through generation of nuisance odours and pollution of surface waters through contamination with animal effluent.

Additional risks have been identified, including impacts to air quality, groundwater resources, soil structure and biosecurity.

The NOI does not contain the level of detail required to provide the NT EPA with the confidence that the Proponent will undertake the proposed actions without significant impact to the environment.

### **Odour Emissions**

Intensive Animal Husbandry can be a source of significant odour emissions which can have an adverse effect on the community amenity.

The proposed land is currently zoned within Zone R (Rural) where Intensive Animal Husbandry is a "Discretionary Use". The majority of the lots in the area have a rural residential use, with sensitive receptors located near the proposed ILEF location which may be affected by odour emissions.

The proposed facility includes a PEQ holding yard, which will emit some odour.

It is important to note that the proposed location of the ILEF is near several facilities which already contribute to odours in the area, namely:

- The existing Santavan PEQ yards, bordering the site to the north
- The AACo beef processing facility, bordering the site to the south
- The existing Noonamah PEQ facility located 5.3 km to the north of the site.

It should be noted that multiple odour complaints regarding existing rural operations in the area have been received by the NT EPA.

### **Separation distances to mitigate odour impacts from feedlots**

In addition to the pre-export quarantine holding yard the proposed ILEF includes a feedlot.

In order to mitigate the impact of odour emission on community amenity from feedlot activities the *National Beef Cattle Feedlot Environmental Code of Practice – 2<sup>nd</sup> Edition* and its companion document the *National Guidelines for Beef Cattle Feedlots in Australia - 3<sup>rd</sup> Edition* propose that a separation distance be calculated and applied between residential receptors and beef cattle feedlot facilities.

Separation distances are calculated based on five factors:

- design and management
- receptor type
- topography or terrain
- vegetative cover
- wind direction

There are uncertainties associated with the calculation of separation distances for odour and these will need to be carefully considered in the EIS in light of existing residences.

### **Odour emissions from composting**

On-site composting is also proposed to occur at the ILEF facility. Poorly managed composting activities can be a significant source of nuisance odour. The NOI does not contain sufficient information regarding the proponent's composting pad design or planned compost management procedures to determine whether odour is likely to be an issue as a result of composting.

## **Surface water**

There is no detail provided in the NOI regarding the expected composition of the facility's wastewater. It is likely that the facility's wastewater will include elevated nutrients and faecal bacteria due to:

- animal effluent
- contaminants introduced via the livestock truck washing facility
- traces of chemicals used on site which could be mobilised by surface water run-off interacting with spills.

A surface water management system has been designed by the proponent (as evidenced by the supplied site plan) however the design rationale is not supplied.

Elevated nutrients, bacterial loads and trace amounts of other contaminants could be mobilised off site by:

- undetected leakages from the treatment ponds
- high rainfall events leading to pond overflow
- irrigation.

These discharges could cause eutrophication, contamination of the waterway and/or potential toxic effects in susceptible organisms.

The proposed site slopes towards the north west and south west, with overland flow travelling 1.3 km before entering Hardy Creek in the north and Berry Creek in the south. Berry Creek sustains Berry Springs Nature Park, a popular recreational water body frequented by tourists and the local community. However it is considered unlikely that contaminants from the ILEF may impact this water body as the south east side of the proposed site is bounded by the railway which, due to its elevation, is likely to provide a level of hindrance to overland flow. It should be taken into consideration that the water quality and flow in Berry Creek is already under pressure from existing rural facilities in the vicinity.

Surface water management and monitoring has not been adequately considered in the NOI. The Proponent is proposing to prepare an Environmental Monitoring Plan which includes limited reactive surface water monitoring on the site. Given the intensity of activities on the site it is considered that more robust monitoring is required.

## **POTENTIAL FUTURE CUMULATIVE IMPACTS**

The life of the proposed ILEF is expected to be greater than 40 years. The proposal is not in line with the proposed future urban and peri-urban land uses in this locality as identified in the draft Darwin Regional Land Use Plan

The proposed ILEF site is located adjacent to areas identified for future residential development in the draft Darwin Regional Land Use Plan (currently on public exhibition). In particular, the area identified as Hughes, Noonamah and Noonamah Ridge area is planned to eventually accommodate up to 45 000 residents.

## **OTHER IMPACTS AND MANAGEMENT PLANS**

### **Noise and Dust**

Intensive Animal Husbandry can be a source of dust and noise emissions which can have an adverse effect on the community amenity. Noise and dust impacts must be assessed as the ILEF is located near existing and planned rural residential receptors.

### **Soil Suitability for Irrigation**

There is no detail provided in the NOI outlining the suitability of soils on site for irrigation and hay/fodder production. It should be noted that the *South Australian Wastewater Irrigation Management Plan (WIMP) Guidelines* consider that “even with ‘sustainable’ irrigation practices, wastewater cannot be applied to land indefinitely. Over time, soil structure may slowly decline, and nutrients or salt may accumulate. Less severe problems can be remedied by cultivation and soil treatment. However accumulation of excess substances in the soil, e.g. phosphorus can only be addressed by stopping wastewater irrigation and changing cropping practices until the concentrations are reduced by crop removal”. Investigation is required of the long term viability of the soils to support the irrigation practices. The Proponent is proposing to prepare an Irrigation (Wastewater) Management Plan which includes annual soil sampling in the irrigation area.

### **Groundwater resources**

There is no detail provided in the NOI regarding the current groundwater quality, its suitability for stock-watering, the proposed water use or the potential impacts of the proposed water management options.

There is also potential for contaminants originating from the facility to adversely impact the shallow groundwater resources which are used for domestic water supply. It is noted that the NOI states the pens, drains, sediment basins and holding ponds will be lined, however no detail is provided as to liner composition. If liners are not suitably designed there is potential for contaminants (including bacterial loads) to impact on the shallow groundwater resources.

### **Erosion and Sediment Control**

The development has the potential to cause erosion on site and turbidity in Hardy Creek. The NOI does not provide adequate detail regarding planned erosion and sediment controls. An Erosion and Sediment Control Plan (ESCP) should be developed in accordance with the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control booklets (2008 or later).

### **Weeds and Pests**

Transport of livestock is known to be a long distance dispersal mechanism for weeds including Gamba Grass (*Andropogon gayanus*) and Hyptis (*Hyptis suaveolens*) which are currently present on site. The Proponent has proposed to develop a Weed Management Plan for the site. In addition the irrigation zones, waste treatment ponds and composting area have the potential to create suitable conditions for pests. The Proponent is proposing to develop a Pest Management Plan to manage pests on the site.

### **Traffic**

There is no detail regarding the potential vehicle movements which could be generated by the project. The Proponent is proposing to develop a Traffic Management Plan to manage the potential risks of the facility on local traffic.

## DECISION

The NT EPA considers that there is a risk of significant impact to the environment from the proposed action and a number of risks cannot be adequately characterised without further studies and a more comprehensive assessment. Therefore, the proposed action requires assessment under the EA Act at the level of an Environmental Impact Statement.



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CHAIR

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

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