ntepa Northern Territory Environment Protection Authority

# TERMS OF REFERENCE FOR THE PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT

# INTEGRATED LIVE EXPORT FACILITY

## WELLARD RURAL EXPORTS

July 2015

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# 1 Introduction

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

The proposed facility will involve the construction of the following infrastructure:

- stormwater management and wastewater treatment system
- 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
- pre-export quarantine holding yard
- feedlot for holding stock for longer than 30 days
- hospital and isolation pens.

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

On 19 March 2015, the Proponent submitted a Notice of Intent for the Project to the Northern Territory Environment Protection Authority (NT EPA) for consideration under the *Environmental Assessment Act* (EA Act).

On 7 May 2015, the NT EPA decided that the Project required further assessment at the level of Environmental Impact Statement (EIS) as the Project presents significant risks to the environment as detailed in its Statement of Reasons. The NT EPA decision was based on the following environmental risks and potential impacts which could result if the facility was not appropriately designed and managed:

- adverse impacts on the air quality of the area as perceived at sensitive receptors due to odour and dust emissions from composting and manure generation at the facility and site irrigation
- soil suitability for irrigation
- adverse impacts on the amenity of the area as perceived at sensitive receptors due to noise emissions from construction and operation of the facility
- contamination of shallow groundwater resources with animal effluent through leaching of wastewater into soil and groundwater
- contamination of Hardy Creek through increased nutrient loads, suspended solids and pathogens, as well as residues of fuels, pesticides, antibiotics and other pharmaceuticals
- impacts to biosecurity in the region via the spread or introduction of weed./.pest species.

In particular the NT EPA's *Statement of Reasons* noted:

- The proposal is not in line with the proposed future urban and peri-urban land uses in this locality as identified in the *Darwin Regional Land Use Plan 2015*.
- The proposed ILEF site is located adjacent to 13 500 proposed residential lots identified in the *Darwin Regional Land Use Plan 2015* which may be developed in the Hughes, Noonamah and Noonamah Ridge area, eventually accommodating up to 45 000 residents.
- The proposed ILEF site is located near a second agricultural facility located 5.3km north of the ILEF site and that odour complaints have been made in respect of this site.

# 2 Scope of the Project

## 2.1 General information

Effective scoping of the Project will assist with the preparation of the EIS as well as clearly defining the footprint and sequence of the development. Establish the context of the Project, including but not limited to the following information:

- the title of the Project
- name of the Proponent, including details of any joint venture partners (if relevant)
- site owner / operating tenant's name and contact details
- the location of the Project in a regional context
- the current status of the Project
- the background to the development of the Project, including a discussion of any previous environmental impact assessment, surveys or investigations undertaken on the site
- the relationship of the Project to any other industry or facility
- details of the environmental record of the Proponent, including any proceedings against the Proponent under a Commonwealth, state or territory law for protection of the environment or the conservation and sustainable use of natural resources, and details of systems and processes that have been subsequently upgraded
- national, state and / or territory standards, codes of practice and guidelines relevant to the Project
- the consequences, both positive and negative, of not proceeding with the Project
- facility expansion options
- an outline of the net economic benefits of the Project.

## 2.2 Project components

The objective of this section is to describe the Project through its lifetime of construction stages and operation. This information is required to allow consideration of all aspects of the Project including all stages from planning and construction through to operation.

The EIS should include details of built structures and infrastructure and operation, as outlined in sections 2.2.1 and 2.2.2 respectively, as well as the following overarching information:

- details of the community consultation strategy proposed for the Project
- details of the type and quantity of all hazardous and dangerous materials, to be used, handled, stored, transported and / or disposed of on-site, including but not limited to, pesticides and pharmaceuticals
- details of the type and quantity of all liquid and non-liquid wastes to be handled, stored, transported and / or disposed of on-site.

### 2.2.1 Built structures and infrastructure

The EIS should include:

- a full description of the construction works that are planned for the Project site
- details of any proposed site earthworks and services including water supply, wastewater infrastructure and drainage
- a construction timetable and staging, hours of construction, construction workforce and proposed construction methods, and planned commissioning date
- an outline, if relevant, of how any demolition activities for site preparation will be carried out in accordance with the NT EPA guidelines for *Asbestos Disposal in the Northern Territory* (http://www.ntepa.nt.gov.au/waste-pollution/guidelines/guidelines).

The EIS should provide the design details and rationale (including calculations) for the following structures:

- feedlots, holding yards and hospital./.isolation pens
- stormwater management and wastewater treatment system, including capacity of the holding pond, spill frequency and drainage flow rates
- composting and manure stockpile pads
- irrigation area for treated wastewater reuse
- livestock truck washing facility
- caretaker's ablution facilities.

### 2.2.2 Operation

Provide specific details of the operation of the facility, in particular:

- Project operational life and operating periods
- the stocking density, livestock diet, predicted frequency and intensity of pen use and proposed months of operation each year
- an estimate of the predicted Project groundwater demand, extraction rates and target aquifers
- Project containment of livestock prior to export
- livestock transport, including number of truck movements, hours and procedures for loading / unloading livestock
- frequency of pen cleaning and details of stockpiling and management of effluent

- details of sources of all waste water to be disposed of at the irrigation area, including any wastewater accepted from outside the Project site
- proposed hydraulic and nutrient budgets for irrigation areas.
- nature of Project processes, products and by-products
- details of operational arrangements relating to the management of compost aeration and moisture levels
- planned operational and equipment maintenance procedures
- information on the management and storage of freshwater and wastewater on site
- management of effluent storage ponds, including maintenance of freeboard and frequency of removal of solids build-up
- details of any contingency measures proposed to minimise the impacts of spills and safely dispose of contaminated waters that may result from storms, fire, flood, equipment malfunction or vandalism. Information should include workforce training, site monitoring and emergency response facilities.

Where relevant, the EIS should include information outlining how aspects of the Project are consistent with industry standards and / or guidelines.

## 2.3 Alternatives

The EIS should describe any feasible alternatives to carrying out the Project. The choice of the preferred option(s) should be clearly explained, including how it complies with the principles and objectives of Ecologically Sustainable Development (ESD).

Discussion of alternatives should include, but not be limited to:

- not proceeding with the Project
- alternative locations that reduce potential land-use conflicts between the Project and present / future sensitive receptors. Consideration should include potential for any future residential developments local to the currently proposed ILEF site. In this respect consultation should occur with the Department of Lands, Planning and the Environment - Lands Planning Branch, to identify any areas of potential future residential development
- alternative layouts that improve Project outcomes, such as demonstrating efforts to avoid proximity to water resources and showing potential areas of modification of contours, drainage etc.
- options to optimise ecological sustainability for the Project, such as alternatives to reduce / offset the Project's environmental footprint and reduce ongoing need for high rates of electricity and water consumption
- consideration of alternative environmental management measures for key risks / impacts
- adverse and beneficial effects (direct and indirect) of alternatives at national, Territory, regional and local levels
- the comparison of short- and long-term advantages and disadvantages of the alternatives.

Environmental impacts should be used as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest impacts.

Sufficient detail should be included to clearly justify why a particular alternative is preferred to another, in terms of:

- ability to satisfy the objectives of the proposal
- relative environmental and other costs of each alternative
- acceptability of environmental impacts and contribution to identified environmental objectives
- acceptability of any environmental risks or uncertainties
- reliability of proposed environmental impact mitigation measures
- efficient use (including maximising re-use) of land, raw materials, energy and other resources.

## 2.4 Approvals, conditions and agreements

Provide information on requirements for approval or conditions that apply, or that the Proponent reasonably believes are likely to apply, to the Project, including:

- a description of approvals obtained / required from any Northern Territory or Commonwealth agency or authority
- a summary of agreements relevant to the Project between the Proponent and the Northern Territory Government, the Australian Government, Traditional Owners, land managers and / or other stakeholders
- details of the approval(s), certificates, permits etc., including any conditions currently imposed.

# 3 Existing environment

Provide a description of the Project area and baseline condition of terrestrial environments, including hydrology, geography, air quality, ecology, cultural, heritage and amenity values, and all relevant socio-economic considerations.

This section must link to the scope of the action and potential avoidance, mitigation and management measures to be implemented throughout the life of the Project.

This section is to identify and reference any relevant (published and unpublished) studies undertaken in the area that will assist in describing patterns and trends in the environment. Description of the Project area and baseline conditions should include, but not be limited to:

- meteorological data (e.g. rainfall, temperature and evaporation, wind speed and direction)
- topography (landform element, slope type, gradient and length)
- geomorphology (rates of landform change and current erosion and deposition processes)
- current surrounding land uses (potential synergies and conflicts) and the present land use zoning

- details of site investigation of soil types, structure, properties (including erodibility; engineering / structural properties, dispersibility, permeability), depth to water table and suitability to support waste water irrigation practices
- site history, including any history of site contamination. Where existing soil contamination is identified, describe proposed remediation, where applicable
- details of any natural / artificial, permanent / ephemeral waterways located within or downstream of the Project area. The EIS should include a description of the hydrology (including drainage patterns), run-off rates, environmental values and potential for flooding.
- sufficient information to predict any potential risks from the Project on groundwater resources within and adjacent to the Project area, including:
    - an analysis of all existing data relating to groundwater resources on and adjacent to the Project area
    - details of any environmental modelling conducted to determine the interaction (if any) between surface water and groundwater on site
    - identification of any groundwater recharge areas on site or in the vicinity of the site (if relevant).
- sensitive receptors potentially at risk from construction and / or operation of the Project. In particular, the EIS should describe the type, location and number of receptors potentially at risk
- baseline dust monitoring
- surveys and assessments identified by the Proponent in the Notice of Intent, including:
    - physical site survey
    - soil assessment (geotechnical agronomic)
    - geological assessment (groundwater supply hydrogeology)
    - odour assessment
    - traffic assessment

Maps should be provided locating the Project and its environs within regional and local contexts. The topography should be detailed with contours at suitable increments, shown with respect to Australian Height Datum (AHD). Significant features of the landscape should be included on the maps, as well as north arrow and scale. Commentary on the maps should be provided highlighting the significant topographical features.

# 4 Risk assessment

The EIS should have specific emphasis on the identification, analysis and mitigation of risks through a whole-of-Project risk assessment. Through this process, the EIS will:

- acknowledge and discuss the full range of risks presented by the Project, including those of special concern to the community
- quantify and rank risks so that the reasons for proposed management responses are clear

- acknowledge levels of uncertainty about estimates of risk and the effectiveness of risk controls
- explicitly identify those members of the community expected to accept residual risks and their consequences, providing better understanding of equity issues
- the anticipated level of performance in meeting required environmental standards and cleaner production principles.

A number of key risks have been identified through a preliminary assessment of the Project. Each of the identified risks should be addressed by the Proponent in the risk assessment and management process. It is expected that further risks will be identified through the comprehensive risk assessment process required for the EIS. These should be addressed and appropriate management initiatives developed to demonstrate that:

- the Proponent is fully aware of risks associated with all predictable aspects of the Project
- the prevention and mitigation of risks are properly addressed in the design specifications
- the risks can and will be managed effectively during each stage of the Project.

Information provided should permit the reader to understand the likelihood and potential severity of each risk presented by the Project, any uncertainty around the risks, and effectiveness of controls. Levels of uncertainty that preclude robust quantification of risk should be clearly acknowledged.

Risk rankings assigned should be fully justified. Where a risk score associated with the likelihood or consequence of an impact is reduced as a result of proposed mitigation measures, clear justification should be provided for the reduction in score. The adequacy and feasibility of mitigation measures must be demonstrable.

Sufficient quantitative analysis should be provided to indicate whether risks are likely to be acceptable or tolerable. A comparison can be made with similar ventures in Australia and internationally. Assumptions used in the analyses should be explained.

Environmental objectives, or overarching goals identifying environmental values to be protected, have been identified for each key risk.

The NT EPA has prepared a series of Environmental Assessment Guidelines to assist in the preparation of EIS documents, available at: http://www.ntepa.nt.gov.au/environmental-assessments/guidelines.

Environmental Assessment Guidelines are developed and updated periodically, and should be referenced and referred to when addressing the information requirements in an appropriate section of the EIS.

The EIS should include an Environmental Management Plan (EMP) for construction and operation of the Project that details relevant mitigation and management measures. The EMP should be prepared in accordance with the NT EPA's *Guideline for the Preparation of an Environmental Management Plan*.

## 4.1 Water

### 4.1.1 Environmental objective

To ensure that surface water and groundwater resources and quality are protected both now and in the future, such that ecological health and land uses, and the health, welfare and amenity of people are maintained.

### 4.1.2 Assessment of risks

The EIS should include a comprehensive assessment of the Project's potential risks to the quality and quantity of the receiving surface water and groundwater systems. At a minimum, the EIS should discuss and evaluate the following:

- contaminants and microbiological pathogens from the Project entering waterways and / or aquifers
- changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater)
- identification of any potential impacts from the Project on quality or quantity of groundwater. Detailed evaluation should occur of any potential for the Project to impact on downstream and / or shared aquifers, and their present and potential future uses
- existing water users potentially impacted by the Project
- the seasonal use / storage and irrigation of water on site. The EIS should assess the proposed storage / disposal methods (irrigation, transfer etc.) and discuss the risks associated with each method during periods of high water availability (Wet Season)
- risks to the values of any areas used for recreational purposes downstream of the facility. Consideration should be given to areas fed by surface and / or groundwater that may be affected by the Project.

In addition to the risks from the Project, consideration should be given to existing developments and risks to waterways in the region. The EIS should discuss the potential for construction and / or operation of the Project to exacerbate these risks.

### 4.1.3 Mitigation

The EMP should include details of mitigation and management measures that will be used to avoid or minimise the potential impacts of the Project on surface water and groundwater, including but not limited to:

- management of surface water flows and waste water during times of high / extreme rainfall events and periods
- maintenance and monitoring of stormwater management and waste water treatment systems
- application of waste and chemical management principles on site for hazardous and dangerous materials, and liquid and non-liquid wastes as identified in Section 2.2
- contingencies for operational events or emergencies which have the potential to impact the environment, such as waste water being unsuitable for irrigation, and hydrocarbon or other hazardous chemical spills or natural disasters.

The EMP should include an Irrigation (Waste Water) Management Plan which outlines measures for ensuring waste water produced during operation is managed in a way that protects the environmental values and beneficial uses of surface and groundwater resources during both Wet and Dry seasons. The Irrigation (Waste Water) Management Plan should include thresholds and criteria for wastewater and outline the additional mitigation measures in the event that the thresholds / criteria are exceeded.

The EIS should outline how any waste water treatment facilities associated with staff ablutions will comply with the Department of Health - *Code of Practice for Small On-site Sewage and Sullage Treatment Systems and the Disposal or Reuse of Sewage Effluent* (http://www.health.nt.gov.au/Environmental_Health/Wastewater_Management/index.aspx).

### 4.1.4 Monitoring

The EIS should include details of the proposed monitoring programs to allow early detection of adverse impacts on environmental values and beneficial uses of regional water resources. Methods to monitor the impacts of the Project on groundwater quantity (if groundwater will be used to service the development) and surface and groundwater quality should be detailed in the EIS. The monitoring program should include, but not be limited to:

- a water monitoring program that is robust enough to evaluate the effectiveness of the mitigation measures identified in the EMP
- methods to monitor the performance of the effluent and waste water treatment system.

The monitoring plan should outline the contingency measures that will be implemented over the stages of the Project in the event that monitoring activities detect a significant change in the environmental values, water quality./.quantity as a result of the Project.

## 4.2 Air Quality

### 4.2.1 Environmental objectives

To ensure that offensive odours and / or dust do not cause unreasonable interference to sensitive receptors.

### 4.2.2 Assessment of risk

The EIS should include the results of a comprehensive risk analysis to assess the potential risks to sensitive receptors as a result of odours and dust from construction and operation of the Project. The risk assessment should identify all aspects of construction and operation that have the potential to generate offensive odours and dust.

Appropriate odour modelling should be undertaken of Project impacts to local air quality. Reference should be made to the document *Technical framework - Assessment and management of odour from stationary sources in NSW* (http://www.epa.nsw.gov.au/air/odour.htm).

The EIS should consider:

- the effect of seasons (Wet and Dry seasons) on the potential risk and nuisance to receptors.
- identified existing sensitive receptors
- future sensitive receptors, including from potential development of any new residential areas local to the proposed ILEF site.

Potential impacts on sensitive receptors should be defined as far as is reasonably practicable.

### 4.2.3 Mitigation and monitoring

Detail preventative and treatment options and strategies that will be used to minimise the potential for odour and dust nuisance from the Project.

In particular, the EIS should include:

- any operational arrangements to minimise dust and odour generation by the Project
- any management strategies that would be implemented to minimise the impacts of the development on local air quality
- details of the separation distances from sensitive receptors, with reference to appropriate standards and / or guidelines
- details of the proposed air monitoring (odour and dust), including technique, location, frequency, laboratory analysis and certification, and target parameters. Proposed reactive management measures tied to monitoring thresholds should be provided
- consideration of community consultation (strategy as required in section 2.2) regarding the potential impacts to community amenity arising from Project dust and odour emissions
- complaint mechanisms including site contacts.

## 4.3 Waste

### 4.3.1 Environmental objectives

To ensure that waste generated by the facility does not cause contamination of land and water resources, or negatively affect the health and amenity of people in the surrounding area.

### 4.3.2 Assessment of risk

The EIS should include the results of a comprehensive risk analysis assessing the adequacy of proposed measures to minimise impacts from the handling, transporting, storage, processing, reuse and disposal of wastes produced on site.

In particular, the EIS should identify and assess:

- the risks associated with the in-flow and out-flow of materials, including transportation, stockpiling, and any discharge to the environment (stormwater, atmosphere, recycling, reuse, landfill)
- the risks associated with the proposed disposal methods for all solid and liquid wastes or recovered materials at the facility.

### 4.3.3 Mitigation and management

Describe the waste management measures that will be used to mitigate and manage the risks associated with waste generated by the Project.

In particular, the EIS should include:

- demonstrated adoption of the waste hierarchy to minimise waste
- measures to ensure waste is appropriately handled to prevent contamination of land and water resources including reuse, recycling, processing and treatment both on- and off-site (including composting), and / or disposal
- consideration of potential requirement for an Environment Protection Approval and/or Environment Protection Licence under the *Waste Management and Pollution Control Act*.

## 4.4 Noise

The EIS should include an assessment of noise from the Project on sensitive receptors, including any potential future residential sensitive receptors in close proximity to the proposed ILEF site. At a minimum, the EIS should identify the potential sources of noise from site establishment, construction and operation of the Project and evaluate the potential nuisance to nearby receptors.

The EIS should include a Noise Management and Monitoring Plan which outlines measures to mitigate and manage potential noise in accordance with the NT EPA Noise Guidelines for Development Sites in the Northern Territory.

The community consultation strategy identified in section 2.2 should consider potential impacts to community amenity arising from Project noise emissions.

## 4.5 Weeds and Pests

The EIS should identify and discuss the potential impacts to vegetation, fauna and habitats of conservation significance at the local and regional scale, including the potential for ongoing indirect impacts as a result of edge effects, weed incursions or other processes exacerbated through clearing activities.

The EMP should outline management measures to mitigate the potential impacts associated with the spread of weeds and pests in the region.

Consultation should occur with the Department of Land Resource Management – Weed Management Branch with regard to weed management, and formulation of an appropriate Weed Management Plan for the Project.

## 4.6 Erosion and sediment control

To mitigate the risks from erosion and sedimentation, the EIS should include an Erosion and Sediment Control Plan (ESCP) that outlines prescriptive measures that will be implemented to mitigate and manage the movement of, and deposition of sediment as a result of disturbance and run-off from the site. The ESCP must be prepared by a suitably qualified professional. It is recommended that the ESCP be prepared consistent with IECA's *Best Practice Erosion and Sediment Control Guidelines 2008* (www.austieca.com.au) and outline the proposed control and maintenance measures for both construction and operation stages of the Project. The ESCP should include maps and diagrams that display where control measures are proposed to be installed.

The EIS should outline erosion and sediment control measures that will minimise disturbance of land, minimise water flow through the site, and filter / trap / detain sediment. Measures should be included to maintain and monitor controls and provide for rehabilitation where applicable.

## 4.7 Biting insects

There is potential for construction activities and ongoing operation of the site to create mosquito breeding sites. The Proponent should be aware of sections of the *Public and Environmental Health Act* that apply to the Project and address risk and management of biting insects in the EIS.

The EIS should:

- include a Biting Insect Management Plan that identifies appropriate mitigation and management measures to minimise mosquito breeding potential and exposure to residents

- outline how the design and construction of ponds associated with the stormwater and waste water treatment system, will adhere to applicable sections of the Department of Health Medical Entomology Guideline *Mosquito Breeding and Sewage Pond Treatment in the Northern Territory*.

Consultation should occur with the Department of Health - Medical Entomology Branch with respect to management and monitoring of potential creation of mosquito breeding habitats, and to inform creation of an appropriate Mosquito Management Plan for the Project.

## 4.8 Cumulative impacts

Cumulative impacts can arise from compounding activities of a single development or multiple developments, as well as the aggregation and interaction of development impacts with other past, current and future activities and land uses that may not be related to the Project.

Assessment of cumulative environmental impacts should be undertaken that considers the potential impact of the Project in the context of existing developments and land uses, and reasonably foreseeable future developments and land uses, to ensure that any potential environmental impacts are not considered in isolation. The extent of cumulative impacts to be considered depends on the nature of the environmental issue and on the resilience of the ecosystem and / or sensitive receptors.

The risk assessment in the EIS should discuss the relevant cumulative impacts of this and other Proposals at an appropriate scale, including discussion of how the Project relates to any other proposals or actions, of which the Proponent should be reasonably aware, that have been or are being taken, and / or have been approved or planned in the region.

In preparing the cumulative impact section, consideration should be given to:

- potential for future residential developments local to the currently proposed ILEF site, with associated new sensitive receptors to off-site Project impacts (such as odour, dust noise and traffic)
- landscape change that originates not only from single projects and management actions, but also from complex and dynamic interactions of multiple past, present and future management actions
- biophysical, social and economic change accumulates through additive or interactive (or synergistic) processes. The aggregate impact of multiple actions on the environment can be complex and may result in impacts that are more significant because of interactive processes
- the fact that an action does not operate in isolation. The most significant changes are often not the result of the direct effects of an individual action, but from the combination of multiple minor effects over the accumulation of time. Given that the action is located near other actions./.operations which have the potential to cause environmental nuisance, consideration should be given to the potential for compounding and / or additional nuisance to the environment and receptors.

## 4.9 Ecologically Sustainable Development

When considering the matters to be addressed in the EIS, the NT EPA is required under the *Northern Territory Environment Protection Authority Act,* to:

- promote Ecologically Sustainable Development
- protect the environment, having regard to the need to enable ESD.

Accordingly, the assessment of the Project, its potential impacts (positive and negative) and the management measures used to enhance positive and reduce negative impacts will be taken in the context of ESD principles, consistent with the *National Strategy for Ecologically Sustainable Developmen*t. Therefore, it is essential that the Proponent demonstrate how it complies with and contributes to the principles and objectives of ESD in the relevant section(s) of the EIS. This includes identifying gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures.

# 5 General advice on the Environmental Impact Statement

## 5.1 Content

The EIS should be a stand-alone document. It should contain sufficient information to avoid the need to search out previous or additional, unattached reports.

The EIS should enable interested stakeholders and the NT EPA to understand the environmental consequences of the Project. Information provided in the EIS should be objective, clear, succinct and easily understood by the general reader. Maps (using an appropriate scale, resolution and clarity), plans, diagrams and other descriptive detail should be included. Technical jargon should be avoided or accompanied by a clear explanation so that it is readily understandable. Cross-referencing should be used to avoid unnecessary duplication of text.

The level of analysis and detail in the EIS should reflect the level of significance of the potential impacts on the environment, as determined through adequate technical studies. Consideration of appropriate spatial, temporal and analytical scales should be used to clearly communicate the potential impacts to the environment. Reliability of the data and an explanation of the sampling criteria and approach should be provided where data are used to support statements, studies and claims in the EIS. All known and unknown variables, limitations or assumptions made in the EIS must be clearly stated and discussed.

Information materials summarising and highlighting risks of the Project should be provided in a culturally appropriate format and language, accompanied by graphics and illustrations that assist with interpretation, where relevant.

## 5.2 Structure, format and style

The EIS should comprise of three elements:

1. Executive summary

The executive summary must include a brief outline of the Project and each chapter of the EIS, allowing the reader to obtain a clear understanding of the proposed action, its environmental implications and management objectives. It must be written as a stand-alone document, able to be reproduced on request by interested parties who may not wish to read the EIS as a whole.

2. Main text of the document

The main text of the EIS should include a list of abbreviations, a glossary to define technical terms, acronyms, abbreviations, and colloquialisms. The document should consist of a series of chapters detailing the level of significance and management of the potential impacts on the environment from the proposed action.

3. Appendices

The appendices must include detailed technical information, studies or investigations necessary to support the main text. These will be made publicly available and should include:

- a table listing how these Terms of Reference have been addressed in the EIS, cross-referenced to chapters, page numbers and / or appendices
- the name of, work done by and the qualifications and experience of the persons involved in preparing the EIS
- a table listing commitments made by the Proponent
- detailed technical information, studies or investigations necessary to support the main text.

The EIS should be produced on A4 size paper capable of being photocopied, with any maps, diagrams or plans on A4 or A3 size paper, and in colour, if possible.

## 5.3 Referencing and information sources

All sources must be appropriately referenced using the Harvard Standard. The reference list should include the address of any internet pages used as data sources. All referenced supporting documentation and data, or documents cited in the EIS must be available upon request. For information given in the EIS, the EIS must state:

- the source of the information
- how recent the information is
- how the reliability of the information was tested
- what uncertainties (if any) are in the information.

All known and unknown variables or assumptions made in the EIS must be clearly stated and discussed. Confidence levels must be specific, as well as the sources from which they were obtained. The extent to which a limitation, if any, of available information may influence the conclusions of the environmental assessment should be discussed.

The EIS must include information on any consultation about the Project, including:

- methods of consultation
- a list of persons and agencies consulted during the EIS
- documented responses to, or the results of, any consultation that has already taken place
- proposed consultation about relevant impacts of the Project
- identification of affected parties, including a statement mentioning any communities that may be affected and describing their views.

The EIS has an important role in informing the public about this Project. It is essential that the Proponent demonstrates how any public concerns were identified and will influence the design and delivery of the Project. Public involvement and the role of government organisations should be clearly identified. The outcomes of any surveys, public meetings and liaison with interested groups should be discussed including any changes made to the proposal as a result of consultation. Details of any ongoing liaison should also be discussed.

## 5.4 Administration

The Proponent should lodge five bound hardcopies and an electronic (Adobe PDF format) copy of the EIS with the NT EPA. The electronic copies should be provided both as a single file of the entire document and separate files of the document components. A Microsoft Word copy of the EIS should be provided to facilitate the production of the Assessment Report.

The Proponent should consider the file size, format and style of the document appropriate for publication on the NT EPA website. The capacity of the website to store data and display the material may have some bearing on how the document is constructed.

The Proponent is to advertise that the EIS is available for review and comment, in the NT News.

The NT EPA requires an advanced draft of the draft EIS document at least two weeks prior to submission of the draft EIS, for an adequacy check.

The NT EPA requires the draft EIS document and a draft of the advertisement prior to advertising the draft EIS to arrange web upload of the document and review and comment on advertising text.

If it is necessary to make use of material that is considered to be of a confidential nature, the Proponent should consult with the NT EPA on the preferred presentation of that material, before submitting it to the NT EPA for consideration. Information of a confidential nature should not be disclosed in the draft EIS if disclosure of the information might:

- prejudice inter-governmental relations between an Australian body politic and a body politic overseas or between two (2) or more bodies politic in Australia or in the Territory
- be an interference with a person's privacy
- disclose information about an Aboriginal sacred site or Aboriginal tradition
- disclose information obtained by a public sector organisation from a business, commercial or financial undertaking that is:
    - a trade secret
    - other information of a business, commercial or financial nature and the disclosure is likely to expose the undertaking unreasonably to disadvantage.

It is an offence under the *Northern Territory Environment Protection Authority Act* to give information to the NT EPA that the person knows is misleading or contains misleading information.

## 5.5 Public exhibition

Sufficient copies of the EIS should be provided to and be made available for public exhibition at:

- NT EPA, Level 2, Suite 201, 12 Salonika Street, Parap, NT
- Northern Territory Library, Parliament House, Corner of Bennett & Mitchell Streets, Darwin, NT
- Environment Centre Northern Territory, Unit 3, 98 Woods Street, Darwin, NT

- Litchfield Council, 7 Bees Creek Road, Fred's Pass, NT

The public exhibition period for the EIS will be 6 weeks. The EIS exhibition period should not occur in late December or January in any year to ensure optimal opportunity for public and Government viewing of the EIS document. Additional time will be added to the EIS exhibition period if the EIS exhibition overlaps any Christmas and January periods.