Avoidance and Mitigation Measures

Initial design decisions represent the greatest opportunity to minimise environmental and social impacts and is the first stage in the mitigation hierarchy of avoid, minimise, rehabilitate and offset. The Project is in a constant iterative process of refining the siting and design of Project alignment considering various environmental and social factors. Initial study area was selected to avoid sensitive receptors. Initial considerations to minimise impacts include:

- Location of alignment to avoid sensitive receptors and habitats, where possible.
- Co-location with existing infrastructure where possible.
- Utilisation of previously disturbed areas.

Preliminary avoidance, management and mitigation measures have been identified and are listed below by physical environments (Note: some measures will be applied to multiple physical environments, but have not been listed in each section to reduce repetition). These measures will be refined, and additional ones added during the preparation of the IAR or EIS, in consultation with the relevant authorities and subject experts, and through the review of applicable guidelines. Preliminary measures include:

- Landforms and Soil:
    - Limiting vehicle movements to defined access roads and existing operational areas.
    - Undertaking major earthworks and ground disturbance activities during the drier months, wherever practicable when exposed surfaces will be less prone to rainfall erosion and avoiding such works during high rainfall periods.
    - Refuelling on impermeable hardstand areas with spill prevention and spill containment kits available in close proximity.
    - Providing training to relevant staff in emergency spill response procedures and responsibilities.
    - Storage of fuels and chemicals in accordance with Australian Standards.
    - Development and implementation of an Environmental Management Plan (EMP).
- Surface and groundwater:
    - Minimising the area of land cleared.
    - Diverting clean water away from disturbed areas.
    - Controlling sediment runoff from stockpiles by installing sediment control structures to prevent sediment release to watercourse.
    - Avoiding stockpiling spoil and/or topsoil in close proximity to existing drainage lines, maintaining a minimum distance of approximately 50 m, where practicable.
    - Ensure regular surface water samples are taken, especially immediately after a storm or intense weather events.

    - Storing fuels, lubricants and process reagents in bunded and lined areas. Bunding will be implemented in accordance with relevant standards and guidelines including AS 1940 Storage and handling of flammable and combustible liquids and the Australian Dangerous Goods Code.

- Air quality:
    - Minimising the area of vegetation to be cleared by locating alignment on land that has already been disturbed.
    - Using tarps or covers for trucks and trailers transporting materials to and from the site.
    - Maintaining vehicle speed limits on-site.
    - Using water for dust suppression on access roads.
    - All plant equipment will meet exhaust air quality standards. Vehicles and machinery will be fitted with the appropriate emission control equipment and will be maintained and serviced frequently.
    - Prepare and implement a greenhouse gas management plan for both the construction and the operational phases of the project.
- Flora and fauna (terrestrial and aquatic):
    - Minimising the area of direct land clearing in areas sensitive to disturbance, such as near waterways.
    - Complete ecology surveys to identify threatened species populations and habitats.
    - Clearly identifying areas of vegetation and habitat that are to be protected and therefore avoided.
    - Stockpiling of vegetation debris collected during clearing for later use in rehabilitation.
    - Progressively rehabilitating disturbed areas.
    - Retaining areas of vegetation that have high species diversity.
    - Felling large trees in a manner that minimises harm to wildlife and damage to surrounding vegetation.
    - Inspection of all earth moving equipment prior to being used on site to ensure that it is free of soil and any vegetative matter.
    - Minimise the time frame between vegetation being cleared and the area being used for Project requirements to reduce the likelihood of weeds becoming established.
    - Rehabilitate disturbed areas as soon as possible to reduce likelihood of weed development.
- Noise:
    - Maintaining construction vehicles and equipment in order to limit noise emissions.

    - Maintaining noise suppression devices on construction vehicles and equipment.

- Visual amenity:
    - Consult with landholders regarding transmission line alignment and potential visual impact.
    - Watering exposed areas to minimise dust generation.
- Social and Cultural Heritage:
    - Implementing operating procedures and staff training to identify artefacts and manage the reporting of cultural heritage.
    - Stopping all works immediately and implementing the Chance Finds Procedure if suspected indigenous or non-indigenous culturally significant material or artefacts are found within 50 m of works.
    - Establishing and maintaining an exclusion zone around identified potential heritage items observed on site.
    - Implementing cultural awareness training for personnel and contractors.
    - Consulting with landholders about location of the final alignment of the transmission line.
    - Have regard to impacts on visual amenity in selecting final alignment.
    - Engage with landholders so they are informed of transmission line stages.
    - Undertaking ongoing engagement with local community (Mt Perry, farming residents) providing clear, factual and accurate information relating to project impacts, in an open and transparent manner.
- Waste:
    - Reducing packaging materials.
    - Monitor the volumes and weights of waste produced.
    - Substituting materials for reusables to reduce waste.
    - Ensure appropriate recycling and reuse of materials.
    - Correct management for the segregation of waste.
    - Waste areas are covered to prevent foraging by animals and birds.
    - Inspect waste management and storage areas regularly.

Ensure regular monitoring of site to ensure no debris or litter has blown into the surrounding environment.