Annexure B

1.1 Legal Requirements

1.1.1 National Environmental Management Act, No. 107 of 1998

NEMA, as amended, establishes the principles for decision-making on matters affecting the environment. Section 2 sets out the National Environmental Management Principles which apply to the actions of organs of state that may significantly affect the environment. Furthermore, Section 28(1) states that "every person who causes or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring". If such pollution or degradation cannot be prevented then appropriate measures must be taken to minimise or rectify such pollution or degradation.

juwi has the responsibility to ensure that the proposed activities, as well as the EIA process, conform to the principles of NEMA. In developing the EIA process, Aurecon has been cognisant of this need, and accordingly the EA process has been undertaken in terms of NEMA and the EIA Regulations promulgated on 18 June 2010[1].

In terms of the EIA regulations, certain activities are identified, which require authorisation from the competent environmental authority, in this case DEA, before commencing. Listed activities in Government Notice (GN) No. 545 require Scoping and EIA whilst those in GN No. 544 and 546 require Basic Assessment (unless they are being assessed under an EIA process).

Since the proposed project is based in the Northern Cape, DEA will work closely with the provincial Department of Environmental Affairs and Nature Conservation (DEANC), to ensure that the provincial environmental concerns are specifically identified and addressed.

1.1.2 National Water Act, No. 36 of 1998

The National Water Act (NWA) (No. 36 of 1998) provides for the sustainable and equitable use and protection of water resources. It is founded on the principle that the National Government has overall responsibility for and authority over water resource management, including the equitable allocation and beneficial use of water in the public interest, and that a person can only be entitled to use water if the use is permissible under the NWA. Section 21 of the NWA specifies the water uses which require authorisation from the Department of Water Affairs (DWA) in terms of the NWA before they may commence.

In terms of Section 21 (c) and (i)[2] of the NWA any activity which takes place within 500 m radius of the boundary of any wetland is excluded from General Authorisation for these water uses and as such, must be licenced. Should the proposed development occur within 500 m radius of a wetland or watercourse it may be necessary to submit a water use license application to the DWA. Numerous drainage lines were identified on the site. Furthermore, *juwi* may source water for the proposed projects from underground sources depending on legal agreements and further details in this regard will be provided in the EIA phase. If a water use licence application (WULA) is required it would fall outside of the scope of this EIA and would be addressed by *juwi* as part of their broader project planning. Comment will be sought from DWA as part of the Scoping and EIA process.

[1] GN No. R 543, 544, 545, 546 and 547 in Government Gazette No. 33306 of 18 June 2010.
[2] (c) impeding of diverting the flow of water in a watercourse; (i) altering the bed, banks, course or characteristics of a watercourse

1.1.3 National Heritage Resources Act, No. 25 of 1999

In terms of the National Heritage Resources Act (No. 25 of 1999) (NHRA), any person who intends to undertake "*any development … which will change the character of a site exceeding 5000 m^2 in extent*", *"the construction of a road…powerline, pipeline…exceeding 300 m in length"* or *"the rezoning of site larger than 10 000 m^2 in extent…"* must at the very earliest stages of initiating the development notify the responsible heritage resources authority, namely the South African Heritage Resources Agency (SAHRA) or the relevant provincial heritage agency. These agencies would in turn indicate whether or not a full Heritage Impact Assessment (HIA) would need to be undertaken.

Section 38(8) of the NHRA specifically excludes the need for a separate HIA where the evaluation of the impact of a development on heritage resources is required in terms of an EIA process. Accordingly, since the impact on heritage resources would be considered as part of the EIA process outlined here, no separate HIA would be required. SAHRA or the relevant provincial heritage agency would review the EIA reports and provide comments to DEA, who would include these in their final environmental decision. However, should a permit be required for the damaging or removal of specific heritage resources, a separate application would have to be submitted to SAHRA or the relevant provincial heritage agency for the approval of such an activity, if *juwi* obtains environmental authorisation and makes the decision to pursue the proposed project further.

1.1.4 Astronomy Geographic Advantage Act (No. 21 of 2007)

The Astronomy Geographic Advantage Act (No. 21 of 2007) provides for the preservation and protection of areas within South Africa that are uniquely suited for optical and radio astronomy; for intergovernmental co-operation and public consultation on matters concerning nationally significant astronomy advantage areas and for matters connected thereto.

Chapter 2 of the act allows for the declaration of astronomy advantage areas whilst Chapter 3 pertains to the management and control of astronomy advantage areas. Management and control of astronomy advantage areas include, amongst others, the following:

- Restrictions on use of radio frequency spectrum in astronomy advantage areas;
- Declared activities in core or central astronomy advantage area;
- Identified activities in coordinated astronomy advantage area; and
- Authorisation to undertake identified activities.

On 19 February 2010, the Minister of Science and Technology (the Minister) declared the whole of the territory of the Northern Cape province, excluding Sol Plaatje Municipality, as an astronomy advantage area for radio astronomy purposes in terms of Section 5 of the Act and on 20 August 2010 declared the Karoo Core Astronomy Advantage Area for the purposes of radio astronomy.

The area consists of three portions of farming land of 13 407 hectares in the Kareeberg and Karoo Hoogland Municipalities purchased by the National Research Foundation. The Karoo Core Astronomy Advantage Area will contain the MeerKAT radio telescope and the core planned Square Kilometre Array (SKA) radio telescope that will be used for the purposes of radio astronomy and related scientific endeavours. The proposed wind energy facilities fall outside of the Karoo Core Astronomy Advantage Area.

The Minister may still declare that activities prescribed in Section 23(1) of the Act may be prohibited within the area, such as the construction, expansion or operation of any fixed radio frequency interference sources and the operation, construction or expansion of facilities for the generation, transmission or distribution of electricity. It should be noted that wind energy facilities are known to cause radio frequency interference. While the Minister has not yet prohibited these activities it is important that the relevant astronomical bodies are notified of the proposed projects and provided with the opportunity to comment on the proposed projects.

1.1.5 Aviation Act, No 74 of 1962

In terms of Section 22(1) of the Aviation Act (Act No 74 of 1962) (13th amendment of the Civil Aviation Regulations (CARs) 1997) the Minister promulgated amendments pertaining to obstacle limitation and markings outside aerodromes or heliports. In terms of this act no buildings or objects higher than 45 m above the mean level of the landing area, or, in the case of a water aerodrome or heliport, the normal level of the water, shall without the approval of the Commissioner be erected within a distance of 8 kilometres measured from the nearest point of the boundary of an aerodrome or heliport. No building, structure or other object which will project above the approach, transitional or horizontal surfaces of an aerodrome or heliport shall, without the prior approval of the Commissioner, be erected or allowed to come into existence. Structures lower than 45 m, which are considered as a danger to aviation shall be marked as such when specified. Overhead wires, cables etc., crossing a river, valley or major roads shall be marked and, in addition, their supporting towers marked and lighted if an aeronautical study indicates it could constitute a hazard to aircrafts.

Section 14 relates specifically to wind energy facilities and it is stated that due to the potential of wind turbine generators to interfere with radio navigation equipment, no wind farm should be built closer than 35 km from an aerodrome. In addition, several other conditions relating specifically to wind turbines are included in Section 14. In terms of the proposed wind energy facility, *juwi* would need to obtain the necessary approvals from the Civil Aviation Authority (CAA) for erection of the proposed wind turbines. It should be noted that while no aerodromes are in close proximity to the site the Aggeneys aerodrome is 30 km west and the Springbok aerodrome is located 116 km south west.

1.1.6 Conservation of Agricultural Resources Act, No. 43 of 1983

The Conservation of Agricultural Resources Act (No. 43 of 1983) (CARA) makes provision for the conservation of the natural agricultural resources of South Africa through maintaining the production potential of land, combating and preventing erosion, preventing the weakening or destruction of the water sources, protecting vegetation, and combating weeds and invader plants. Regulation 15 of CARA lists problem plants (undesired aliens, declared weeds, and plant invaders). Plants listed in this regulation must be controlled by the landowner.

As such, as part of the EIA process, recommendations should be made to ensure that measures are implemented to maintain the agricultural production of land, prevent soil erosion, and protect any water bodies and natural vegetation on site. *juwi* together with the relevant farmers should also ensure the control of any undesired aliens, declared weeds, and plant invaders listed in the regulations that may pose a problem as a result of the proposed projects.

1.1.7 National Road Traffic Act, No. 93 of 1996 (as amended)

The National Road Traffic Act (No. 93 of 1996) (as amended) (NRTA) makes provision for all matters pertaining to the use and management of roads within South Africa. In terms of this policy certain vehicles and loads cannot be moved on public roads without exceeding the limitations in terms of the dimensions and/or mass as prescribed in the Regulations of the NRTA. Where such a vehicle or load cannot be dismantled without disproportionate effort, expense or risk of damage, into units that can travel or be transported legally, it is classified as an abnormal load. When the movement of an abnormal load is considered to be in the economic and/or social interest of the country, a special permit may be issued to allow it to operate on a public road for a limited period. Permits are normally issued by the Provincial Road Authorities and, if necessary, input is obtained from local and metropolitan authorities. Should such a permit be required, *juwi* would need to obtain the necessary road permits from the relevant Road Authorities as it is outside of the scope of the EIA process.

1.1.8 The National Environmental Management: Biodiversity Act, No. 10 of 2004

The National Environmental Management Biodiversity Act (No.10 of 2004) provides for the management and conservation of South African biodiversity within the framework of National Environmental Management Act. It deals, *inter alia*, with the protection of species and ecosystems

that warrant national protection. Chapter 4 of the Act makes provision for the protection of critically endangered, endangered, vulnerable, and protected ecosystems that have undergone, or are at risk of undergoing significant degradation of ecological structure, function, or composition due to anthropogenic influences. Chapter 3 provides for Biodiversity Planning instruments, such as Bioregional Plans. No such Bioregional Plan exists for the area of concern yet, but a precursor to this, a Biodiversity Sector Plan (BSP), has been drafted Namakwa District BSP, 2008. The BSP provides a way forward in reconciling the conflict between development and the maintenance of natural systems. The BSP provides baseline biodiversity information needed for land-use planning and decision making and other multi-sectoral planning processes, through the identification of Critical Biodiversity Areas and Ecological Support Areas. Protecting these areas is important when considering the maintenance of Biodiversity.

1.1.9 Mineral and Petroleum Resources Development Act, No 28 of 2002

By virtue of the Minerals and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), the State exercises sovereignty over all mineral and petroleum resources within South Africa and ensures the equitable access to such resources and the benefits derived there from. In seeking to promote economic growth and mineral and petroleum resources development, the Minister must also ensure that the natural resources are developed in a manner that is ecologically sustainable. Applications can be made for both prospecting and mining rights, as well as a mining permit to the Minister, which may be granted provided that the requisite environmental management programmes and plans have been submitted. In terms of the provisions on the MPRDA, the sourcing of material for road construction and foundation purposes (i.e. the use of borrow pits[1]) is regarded as mining and accordingly is subject to the requirements of the Act. In terms of the current project, one section of the Act is most relevant: If material is to be sourced on a property that would not form part of the development, and/ or is not owned by the applicant, authorisation would be required from Department of Mineral Resources (DMR). In terms of Section 27 of the Act, if the proposed borrow pits would be mined in less than two years and would each be less than 5 ha in extent, a Mining Permit would be required. If the borrow pit exceeds 5ha, a Mining Right would be required. *juwi* is currently not applying for any borrow pits and as such no licence or permit in terms of the MRDA is required.

[1] Gravel for construction purposes such as roads and foundations is obtained from a borrow pit, which consists of a shallow depression generally 1.5-2.5 m deep and 2-4 ha in area.