DECOMMISSIOING PHASE: ENVIRONMENTAL MANAGEMENT PROGRAMME

It is important to note that this Decommissioning Phase Environmental Management Programme (DEMPr) Framework has been drafted prior to the construction of the wind energy facility (WEF) and should therefore be regarded as a living document which will be changed over time in response to project evolution. However, it is important that the underlying principles and objectives on which the document is based are retained. This is in keeping with current environmental and associated legislation, that all environmental management procedures and actions should be reviewed and refined on an on-going basis.

The turbine infrastructure which will be utilized for the Longyuan Mulilo De Aar Maanhaarberg WEF is expected to have a lifespan of approximately 20 years. Equipment associated with the facility would only be decommissioned once it has reached the end of its economic life. It is most likely that decommissioning activities of the infrastructure would compromise the disassembly and replacement of the turbines with more appropriate technology / infrastructure at that time as all the infrastructure, such as roads, transmission, substations and foundations, are already established, and the energy source is a renewable one (i.e. wind). All redundant equipment that was replaced would be removed from site and sold off.

The following activities have been considered to form part of the decommissioning phase:

1. Site preparation activities will include confirming the integrity of the access to the site to accommodate the required equipment and lifting cranes, preparation of the site (e.g. lay down areas, construction platform) and the mobilization of construction equipment.
2. A large crane will be brought on site where it will be used to disassemble the turbine and tower sections. These components will be re-used, recycled and disposed of in accordance with regulatory requirements. All parts of the turbines would be considered re-usable or recyclable, except for the blades.

If the facility is decommissioned then the site will by fully rehabilitated in accordance with the requirements in terms of relevant legislation, such as the National Environmental Management Act (act 107 of 19980), as amended. The concrete bases of the turbines, transformers and transmission lines could be removed, but it may be better to leave them under the ground, as this causes fewer disturbances. If so, they would be covered with soil, stone or other indigenous material, and the site returned as closely as practicable to its original state. The turbine itself will be removed, as described above. All roads will be left on site, as it would assist the farmer in accessing his land.

A rehabilitation cost has been budgeted for decommission of the plant.