

Karoo Central Astronomy Advantage Areas

FORM 5: Permit application in connection with electrical activities

Purpose

This form must be used to apply for a permit to install, operate or use electrical infrastructure and/or equipment within the Karoo Central Astronomy Advantage Area 1, where the infrastructure/equipment is not exempt from the permit requirement.

Background

The Astronomy Geographic Advantage Act, 2007 (Act No.21 of 2007) ("AGA Act"), provides inter alia for the protection of areas within the Republic of South Africa that are uniquely suited for radio astronomy.

The Karoo Central Astronomy Advantage Areas were declared for the purpose of radio astronomy and related scientific endeavours in terms of the AGA Act in Government Gazette No. 37434, under Notice No. 198, on 12 March 2014.

The Regulations on the Protection of the Karoo Central Astronomy Advantage Areas, made in terms of the AGA Act, were published in Government Gazette No. 41321, under Notice No. 1411, on 15 December 2017. The effective date of the Regulations is 15 December 2018.

The Regulations stipulate the following¹:

- Schedule D, sub-regulation 3(2): Radio frequency interference may not be caused by electrical equipment/infrastructure within the SKA Infrastructure Territory, whether through electromagnetic emissions or through wireless data communications. Electrical equipment/infrastructure must be separated from the SKA Infrastructure Territory and the SKA Virtual Centre by the required distances so as not to exceed the radio frequency interference levels prescribed in the Protection Levels Regulations, 2012.
- Schedule D, sub-regulation 3(1): No person may construct, install, operate or use any electrical infrastructure or equipment within the Karoo Central Astronomy Advantage Area 1 unless a permit to do so has been issued, or unless the infrastructure/equipment has been exempted from the requirement that a permit be issued.
- 3. Schedule D, sub-regulations 3(3), (4) and (5): The following categories of electrical equipment/infrastructure are exempt from the permit requirement:
 - 3.1 Equipment/infrastructure in operation or use prior to the publication date of the Regulations (15 December 2017), unless radio frequency interference is caused.

¹ The statement of the requirements of the Regulations in this form are provided for the convenience of the applicant. Nothing stated in the application form will negate anything prescribed in the published Regulations.

- 3.2 New equipment/infrastructure with an electrical power rating not greater than 100 kVA, unless radio frequency interference is caused.
- 3.3 New equipment/infrastructure with an electrical power rating greater than 100 kVA that is located more than 30 km from the nearest Square Kilometre Array (SKA) Infrastructure Territory or more than 50 km, in the case of wind turbines unless radio frequency interference is caused.
- 4. Schedule D, regulation 4 prescribes the procedures and criteria for permit applications and their processing by the management authority. If the information requested in the form below is insufficient for conducting an electromagnetic interference assessment, a permit application must be accompanied by the information listed and described in a schedule to be obtained from the management authority.
- 5. By signing the application form, permission is given to the Astronomy Management Authority by the applicant to process, collect, receive, record, organise, collate, store, update, modify, retrieve, alter, consult, use, disseminate, distribute, merge, share, link, erase or destroy personal information received from the applicant.

Details of electromagnetic emission for which a permit is required	
Legislation	Astronomy Geographic Advantage Act, 2007
AGA unique reference	
Site name	
Environmental authorisation number including attachment (if applicable)	
Municipality/nearest town	
Type of electrical facility	
Description of the electrical infrastructure and equipment	
Permit applicant	
Applicant/company name	
Physical address	
Postal address	
Website	
Phone number	
Email address	

Contact person	
Surname	
Full Names	
Mobile number	
Email address	
Electrical equipment description	
Type of equipment	
Brand name(s)	
Model number(s)	
Photo (as attachment)	
Electrical power rating of equipment (kVA)	
EMC standard	
Geographic location (longitude and latitude in WGS84 decimal degrees)	
Date of purchase	
Comments	
Highest emission level (dBm)	
Frequency of highest emission level	
Detailed measurement data attachment in XLSX format as defined by the management authority	
Attachments	
Any relevant information that was not provided for in this form or could not be accommodated in the space provided	

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