



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Centre Building, 185 Francis Baard Street, Pretoria, Tel: (012) 336-7500, Fax: (012) 326-4472/ (012) 326-2715 www.dwa.gov.za

LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998) (THE ACT)

I, **Trevor Balzer**, in my capacity as Director General (Acting) in the Department of Water and Sanitation and acting under authority of the powers delegated to me by the Minister of Water and Sanitation, hereby authorise the following water uses in respect of this licence.

SIGNED: 

DATE: 3 Aug 2014

LICENCE NO: 10/D41K/G/2631

FILE NO: 27/2/2/D1041/9/9

1. **Licensee:** Adams Solar PV Project Two (Pty) Ltd (Phase 1)
Postal Address: P.O.BOX 2881
Cape Town
8000
2. **Water uses**
 - 2.1 Section 21(g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and II.
3. **Property on which the use will be exercised**
 - 3.1 Section 21(g) of the Act: Portion 0 of Farm Adams 328
4. **Registered owner of the Property**
 - 4.1 Saltrim Ranches (Pty) Ltd

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5. Licence and Review Period

- 5.1 This licence is valid for a period of twenty (20) years from the date of issuance and it may be reviewed every five (5) years.

6. Definitions

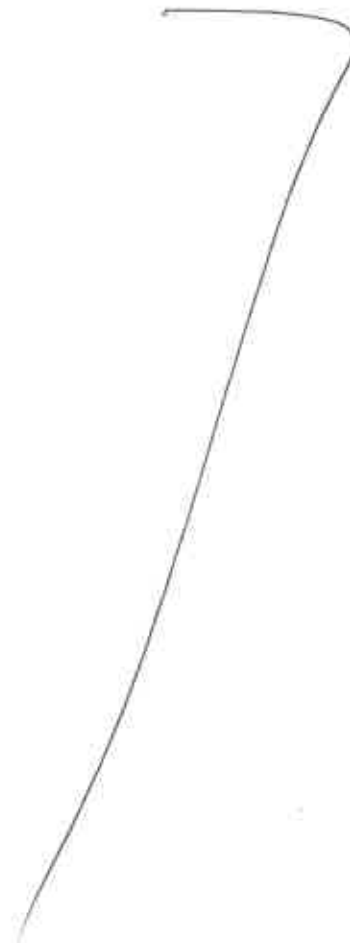
“Any terms, words and expressions as defined in the National Water Act, 1998 (Act 36 of 1998) shall bear the same meaning when used in this licence.”

“The Provincial Head” means the Provincial Head: Northern Cape, Department of Water and Sanitation, Private Bag X6101, Kimberley, 8301.

“Report” refers to the report Environmental Management Plan by Escience Associates (Pty) Ltd dated May 2014. Integrated Water and Waste Management Plan by M² Environmental Connections cc dated May 2014 as well as all other related documentation and communication (email, letters, verbal etc) related thereto.

7. Brief description of the project

This licence authorises Adams Solar PV Project Two (Pty) Ltd in terms of Section 40 of the National Water Act, 1998 (Act 36 of 1998) for Section 21 (g) for the disposal of domestic sewage and grey effluent into a conservancy tank located on Portion 0 of Farm Adams 328, which falls within the Lower Vaal Water Management Area in quaternary catchment D41K, in the Northern Cape Province.



APPENDIX I

General conditions for the licence

1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
3. The Licensee must immediately inform the Provincial Head of any change of name, address, premises and/or legal status.
4. If the property in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Provincial Head of the Department within sixty (60) days of the said change taking place.
5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory.
6. The Licensee must be responsible for any water use charges or levies imposed by a Responsible Authority.
7. The licence must not be construed as exempting the Licensee from compliance with the provisions any other applicable Act, Ordinance, Regulation or By-law.
8. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.
9. The Licensee must conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit must be submitted to the Provincial Head within one (1) month of the finalisation of the audit.
10. The Licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within three (3) months of the date this licence and a report on the audit shall be submitted to the Provincial Head within one (1) month of finalisation of the report.
11. Flow metering, recording and integrating devices must be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two (2) years. Calibration certificates must be available for inspection by the Provincial Head or his representative upon request.
12. Any incident that causes or may cause water pollution must be reported to the Provincial Head or his/her designated representative within 24 hours.
13. If the water use authorised in this licence is not fully exercised within three (3) years of this licence, the licence may be terminated or amended accordingly. Upon commencement of the water use, the Licensee must inform the Provincial Head in writing.

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APPENDIX II

Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource

1. CONSTRUCTION, OPERATION AND MAINTENANCE

- 1.1 The Licensee must carry out and complete all the activities, including the construction and operation of the facilities listed in Table 1, according to the Report and according to the final plans submitted with the Integrated Water Use Licence Application as approved by the Provincial Head:

Table 1: Section 21 (g) water use activities

Description	Property description	Capacity (m ³)	Co-ordinates
Disposal of domestic sewage and grey effluent into a conservancy tank	Portion 0 of Farm Adams 328	6m ³	S 27°22'23.72" E 23°00'26.44"

- 1.2 The Licensee must ensure that the disposal of the wastewater and the operation and maintenance of the system are done according to the provisions in the Report.
- 1.3 The Licensee must as well submit a report detailing the type of sealed container used and specification of the onsite sanitation facility to the Provincial Head after the completion of the waste facilities listed in Table 1.
- 1.4 The Licensee must use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.

2. MONITORING

- 2.1 The Licensee must develop at least two groundwater monitoring wells positioned up and down gradient of the conservancy tank.
- 2.2 Groundwater quality must be monitored on a quarterly basis and the analysis results must be forwarded to the Provincial Head annually.
- 2.3 The date, time and monitoring point in respect of each sample taken must be recorded together with the results of the analysis.
- 2.4 Monitoring points must not be changed prior to notification to and written approval by the Provincial Head.
- 2.5 Analysis must be carried out in accordance with methods prescribed by and obtainable from the South African National Standards (SANS), in terms of the Standards Act, 1982 (Act 30 of 1982).
- 2.6 The methods of analysis must not be changed without prior notification to and written approval by the Minister.

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3. WATER RESOURCE PROTECTION

- 3.1 The impact of the activities of the industry on the groundwater must not exceed the groundwater quality detailed in Table 2 as provided for by the Preliminary Groundwater Reserve for D41K catchment area or when subsequently determined, updated and reviewed.

Table 2: Preliminary Groundwater Reserve

Parameters	Groundwater Reserve Quality
pH	5 – 9.5
Total Dissolved Solids (mg/l)	1000
Electrical Conductivity (mS/m)	150
Sodium (mg/l) as Na	200
Magnesium (mg/l) as Mg	70
Calcium (mg/l) as Ca	150
Chloride (mg/l) as Cl	200
Sulphate (mg/l) as SO ₄	400
Nitrate (mg/l) as NO ₃ _N	10
Fluoride (mg/l) as F	1.5
Faecal Coliform (counts/100ml)	1

4. REPORTING

- 4.1 The Licensee must submit the results of analysis for the monitoring requirements to the Provincial Head on a quarterly basis under Reference number 27/2/2/D1041/9/9.

5. STORMWATER MANAGEMENT

- 5.1 A suitable stormwater management plan must be submitted as part of the Integrated Water and Waste Management Plan (IWWMP).
- 5.2 Stormwater leaving the Licensee's premises must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.
- 5.3 Stormwater must be diverted from the industrial site and roads and must be managed in such a manner as to disperse runoff and concentrating the stormwater flow.
- 5.4 Where necessary works must be constructed to attenuate the velocity of any stormwater discharge and to protect the banks of the affected watercourses.
- 5.5 Stormwater control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.

6. PLANT AREAS AND CONVEYANCES

- 6.1 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled

material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.

- 6.2 Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.
- 6.3 Any access roads or temporary crossings must be:
 - 6.3.1 non-erosive, structurally stable and shall not induce any flooding or safety hazard
 - 6.3.2 Be repaired immediately to prevent further damage.

7. ACCESS CONTROL

- 7.1 Strict access procedures must be followed in order to gain access to the property.
- 7.2 Notices prohibiting unauthorised persons from entering the controlled access areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

8. CONTINGENCIES

- 8.1 Accurate and up-to-date records must be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records must be available for inspection by the Provincial Head upon request. Such malfunctions must be tabulated under the following headings with a full explanation of all the contributory circumstances:
 - 8.1.1 operating errors;
 - 8.1.2 mechanical failures (including design, installation or maintenance);
 - 8.1.3 environmental factors (e.g. flood);
 - 8.1.4 loss of supply services (e.g. power failure); and
 - 8.1.5 other causes.
- 8.2 The Licensee must, within 24 hours, notify the Provincial Head of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.
- 8.3 The Licensee must, within 14 days, or a shorter period of time, as specified by the Provincial Head, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Provincial Head of measures taken to:
 - 8.3.1 correct the impacts resulting from the incident
 - 8.3.2 prevent the incident from causing any further impacts and
 - 8.3.3 prevent a recurrence of a similar incident.

9. AUDITING

- 9.1 The Licensee must conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit must be submitted to the Provincial Head within one month of finalisation of the report, and must be made available to an external auditor should the need arise.

9.2 The Licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within six (6) months of the date this license was issued and a report on the audit shall be submitted to the Provincial Head within one month of finalisation of the report.

10. INTEGRATED WATER AND WASTE MANAGEMENT

10.1 The Licensee must update an *Integrated Water and Waste Management Plan (IWWMP)*, which must together with the updated *Rehabilitation Strategy and Implementation Programme (RSIP)*, be submitted to the Provincial Head for approval within three (3) months from the date of issuance of this licence.

10.2 The IWWMP and RSIP shall thereafter be updated and submitted to the Provincial Head for approval, annually.

10.3 The Licensee must, at least 180 days prior to the intended closure of any facility, or any portion thereof, notify the Provincial Head of such intention and submit any final amendments to the IWWMP and RSIP as well as a final *Closure Plan*, for approval.

10.4 The Licensee must make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long-term water management strategy.

10.1 The Licensee shall ensure that the necessary steps are taken to ensure that spillage from the conservancy tank must be kept at a minimum. It is recommended that the DWA guideline document titled "*A Protocol to Manage the Potential of Groundwater Contamination from Onsite Sanitation*" second edition be used in order to minimise any risks with on site sanitation.

11.1 An action plan needs to be drafted by the Licensee and endorsed by the Department which will deal with accidental spillages (and monitoring thereof) of the waste.

10.2 The Licensee must ensure that all waste (except for grey and black water) generated during the construction and operational phases are not disposed of on site. Waste minimisation, re use, recovery and recycling shall be implemented. Construction and installation material shall be stored in such a manner as to protect the ground and surface water resources and shall be appropriately disposed of in permitted Municipal Waste Disposal sites. Grey and black water will only be temporarily stored on site.

10.3 The Licensee must ensure that the establishment and operation of the workshop are done in such way as not to pollute the groundwater and surface water resource.

10.4 The Licensee must ensure that no hazardous chemicals are used to wash the solar panels, without the written approval from the Department.

10.5 The Licensee must ensure that revised Environmental Management Plan (EMP) shall be submitted for approval to the Provincial Head prior to the commencement of the water use activity.

10.6 The Licensee must ensure that groundwater mitigation measures are designed to cover and protect site specific impacts arising from the site activities.

- 10.7 The Licensee must undertake corrective action within six (6) weeks from the date of a spillage problem occurring and must notify the Department within 48 hours of the incident occurring.
- 10.8 The underground septic tanks must be constructed to an acceptable standard with proper and recommended lining methods. The tanks must be designed in such a manner that any leakage can be contained and reclaimed without any impact on the surrounding environment, an early warning detection system must be installed and monitored to detect any leakages or malfunction in time in order to take corrective action to protect water resources.

END OF LICENCE





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