

## Department of Environmental Affairs and Development Planning Adri La Meyer

Directorate: Development Facilitation Adri.LaMeyer@westerncape.gov.za

## **DEPARTMENTAL REFERENCES:**

16/3/3/6/4/2/1/F4/18/3074/21 (Development Management)
19/3/2/4/F4/7/DDF011/21 (Pollution and Chemicals Management)
19/2/5/3/F4/7/WL0026/21 (Waste Management)
19/4/4/1/BW1 – Farm Waschklip 183, Langebaan (Air Quality Management)

**DATE: 12 April 2021** 

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PER E-MAIL

Dear Sir

COMMENTS ON THE DRAFT AMENDMENT APPLICATION MOTIVATION REPORT FOR THE PROPOSED AMENDMENT OF THE ENVIRONMENTAL AUTHORISATION FOR THE DEVELOPMENT OF A 100MW COMMERCIAL SOLAR PHOTOVOLTAIC ELECTRICITY GENERATION FACILITY AND ASSOCIATED INFRASTRUCTURE ON THE FARM WASCHKLIP NO. 183 (SOVENTIX SA SALDANHA 1), NEAR LANGEBAAN (DFFE REF: 12/12/20/2126/AM6)

The e-mail notification of 26 January 2021 providing a Background Information Document ("BID") and notifying the Department of the intended application for an amendment of the environmental authorisation ("EA"), the Department's response to the e-mail notification with comments on the BID sent via e-mail on 27 January 2021, and the e-mail notification of 09 March 2021 to interested and affected parties regarding the availability of the Draft Amendment Application Motivation Report for comment, refer.

Please find collated comments from various directorates in the Department on the Draft Amendment Application Motivation Report (hereinafter referred to as "the Report") dated 09 March 2021 that was downloaded from the website provided by the environmental assessment practitioner.

1. Directorate: Development Management (Region 1) – Mr Bernard Kgosana (Bernard.Kgosana@westerncape.gov.za):

## 1.1. The following is understood:

- 1.1.1. On 25 January 2013, the then Department of Environmental Affairs ("DEA") granted an EA for the development of a 75-Megawatt ("MW") commercial solar photovoltaic ("PV") electricity generation facility on the Farm Waschklip No. 183, near Langebaan (reference 12/12/20/2126).
- 1.1.2. On 21 October 2013, the then DEA granted an amendment to the EA, amending a description of a listed activity (DEA reference 12/12/20/2126/AM1).
- 1.1.3. On 11 November 2015, the then DEA granted an amendment to the EA, extending the validity period of the EA (DEA reference 12/12/20/2126/AM2).
- 1.1.4. On 18 January 2018, the then DEA granted an amendment to the EA, further extending the validity period of the EA (DEA reference 12/12/20/2126/AM3).
- 1.1.5. On 27 January 2020, the then DEA granted an amendment to the EA, further extending the validity period of the EA (DEA reference 12/12/20/2126/AM4).
- 1.1.6. On 03 December 2020, the then Department of Environment, Forestry and Fisheries ("DEFF") granted an amendment to the EA, correcting GPS middle point coordinates, amending the address of the applicant, and amending the project description, including an amendment to the capacity of the solar PV facility from 75MW to 100MW (DEFF reference 12/12/20/2126/AM5).
- 1.2. The applicant is now applying for a Part 2 amendment of the EA. The proposed amendments entail:
  - 1.2.1. The inclusion of battery energy storage system ("BESS") and gas turbine generation and associated fuel storage that are needed to ensure that the solar PV facility can meet its generation mandate.
  - 1.2.2. An 167MWh Lithium-Ion battery storage is required, equating to 22 x 40-foot containers. Each shipping container will have a dimension of 12.2(I) x 2.43(w) x 2.59(h), resulting in a total footprint of approximately 667m<sup>2</sup>.
  - 1.2.3. Additionally, five gas turbine units will be required to generate <10MW of backup electricity. Each turbine unit will take up the footprint of a 40-foot container.
  - 1.2.4. Aboveground diesel storage of less than 30m³ will be required to provide the gas turbines with fuel. The additional infrastructure of the containerised batteries and gas turbines will only occupy a nominal footprint (<700m²) in relation to the entire development footprint.
- 1.3. The following comment on the Report is offered:
- 1.3.1. This Directorate notes that a Screening Tool Report has not been included in the Report. Please note that a Screening Tool Report is required as part of an application for a Part 2 amendment.
- 1.3.2. This Directorate further notes that a site sensitivity verification report has not been included in the Report. A site sensitivity verification report must therefore be provided in accordance with the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Section 24(5) (a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation ("the Protocols") that have been published in the

- Government Gazette<sup>1</sup>. It is advised that the Report be revised to include the outstanding information and that a Revised Draft Report be made available for an additional commenting period of a minimum of 30 days.
- 1.3.3. The similarly listed activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") Environmental Impact Assessment Regulations, 2014 (as amended) must be included in the Amendment Application Motivation Report.
- 1.3.4. Proof of the public participation process conducted must be included in the Final Amendment Application Motivation Report to be submitted to the competent authority.
- 2. Directorate: Pollution and Chemicals Management Mr Gunther Frantz (Gunther.Frantz@westerncape.gov.za):
- 2.1. As per the management measures stated in the Draft Amended Environmental Management Programme ("EMPr") dated March 2021, it is essential that the aboveground storage of diesel is housed within a suitably constructed bund that can hold 110% of the maximum allowable volume, which should be covered, if possible, with a roof to minimise rainwater ingress.
- 2.2. The following general recommendations are provided to prevent and manage potential contamination of water resources, including groundwater, emanating from the site during the construction, operational and decommissioning phases, through the inclusion of the proposed BESS:
  - 2.2.1. Compilation and adherence to a procedure for the safe handling of battery cells;
  - 2.2.2. Lithium-ion batteries must have battery management systems (containment, automatic alarms and shut-off systems) to monitor and protect cells from overcharging or damaging conditions, such as temperature extremes;
  - 2.2.3. Compilation of an Emergency Response Plan for implementation in the event of a spill or
  - 2.2.4. Provision of spill kits on-site for clean-up of spills and leaks;
  - 2.2.5. Immediate clean-up of spills and disposal of contaminated absorbents and materials or soil at a licensed hazardous waste disposal facility;
  - 2.2.6. Recording and reporting of all significant fuel, oil, hydraulic fluid or electrolyte spills or leaks so that appropriate clean-up measures can be implemented. A copy of these records must be made available to authorities on request throughout the project lifecycle;
  - 2.2.7. Frequent and appropriate disposal of both general and hazardous waste to prevent pollution of soil and groundwater;
  - 2.2.8. Installation of leak detection monitoring systems, where possible;
  - 2.2.9. On-site battery maintenance should only be undertaken on impermeable surfaces with secondary containment measures. Any resulting hazardous substances must be disposed of appropriately;
  - 2.2.10. All storm water runoff must be controlled to ensure that on-site activities do not culminate in possible off-site pollution; and
  - 2.2.11. Provision of suitable emergency and safety signage on site, and demarcation of any areas which may pose a safety risk (including hazardous substances). Emergency numbers for the

<sup>1</sup> Government Notice ("GN") No. 320 of 20 March 2020 in Government Gazette No. 43110, which came into effect on 09 May 2020; and GN No. 1150 of 30 October 2020 in Government Gazette No. 43855, which came into effect on 30 October 2020.

local police, fire department, Eskom and the local municipality must be placed in a prominent clearly visible area on-site.

- 2.3. Both the Department of Forestry, Fisheries and the Environment and this Directorate are to be duly notified immediately of any incident in terms of section 30 of the NEMA (page 12 of the EMPr). The EMPr should be amended to specifically include reference to section 30 of the NEMA, pertaining to the control of incidents.
- 3. Directorate: Development Facilitation Mr Ryan Apolles (<u>Ryan.Apolles@westerncape.gov.za</u>):
- 3.1. Please provide more information to illustrate the difference between the proposed generator sets and the gas turbine units. A process flow diagram in this regard would also be appreciated.
  - 3.1.1. The Report states that the diesel generators sets will be a supplementary power source to the PV facility and battery backup. The Report further states that skid-mounted generator units will be located alongside the project substation and that a total of nine generator sets will be installed, each with a rated power output of 1 000kW. Based on the information provided in the Report, it appears that the generator sets will supplement the power requirement as backup during the 15-day project reliability run only, with limited fuel consumed during operation.
  - 3.1.2. It is noted that five gas turbine units will be required to generate <10MW of backup electricity and that less than 30m<sup>3</sup> of aboveground diesel storage will be required to provide the turbines with fuel.
  - 3.1.3. Ideally, a site layout plan to indicate the location of the proposed BESS, generator sets and gas turbine units in relation to the layout of the approved solar PV facility and associated infrastructure should have been provided.
- 3.2. Please note that correct e-mail address for Mr Jandre Bakker at the Department of Transport and Public Works is <u>Jandre.Bakker@westerncape.gov.za</u>.
- 4. Directorate: Waste Management Mr Etienne Roux (Etienne.Roux@westerncape.gov.za):
- 4.1. Kindly note that should more than 100m<sup>3</sup> of general waste, or more than 80m<sup>3</sup> of hazardous waste be stored at the solar PV facility for a period exceeding 90 days, the facility will need to register in terms of, and adhere to, the National Norms and Standards for the Storage of Waste promulgated in Government Notice ("GN") No. 926 of 29 November 2013.
- 4.2. Hazardous and general waste should be stored separately. If there is mixing of these two waste streams, the entire portion of waste will be considered hazardous.
- Directorate: Air Quality Management Mr Deon Stoltz (<u>Deon.Stoltz@westerncape.gov.za</u>):
- 5.1. The following comments are provided for consideration in the EMPr:
  - 5.1.1. It is expected that dust and exhaust emissions will be generated during the various phases of the proposed development and could therefore be a significant nuisance. Dust generated during the various phases of the proposed development must comply with the National Dust

Control Regulation (GN No. R. 827 of 1 November 2013), promulgated in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM: AQA"). These regulations prohibit a person from conducting any activity in such a way as to give rise to dust in such quantities and concentrations the dust, or dust fall, has a detrimental effect on the environment, including health.

- 5.1.2. It is recommended that a dust monitoring programme/ fugitive dust control plan, inclusive of dust suppression/collection methods, be implemented for both the Soventix SA Saldanha 1 and 2 solar PV facilities.
- 5.1.3. Noise generated from the installation and operation of the various activities (e.g. air filters, gas compressors, gas turbines, electricity generators, electricity transformers, etc.) must comply with the Western Cape Noise Control Regulations (Provincial Notice 200/2013).
- 5.1.4. In terms of section 35(2) of the NEM: AQA, the occupier of the premises must take all reasonable steps to prevent the emission of any offensive odour (diesel fumes, etc.) caused by any activity on such premises. It should be noted that all offensive odour complaints must be recorded, reported and investigated, should it be required.
- 5.1.5. It is envisaged that likely emissions from the proposed activities requiring an amendment to the EA, include carbon dioxide, sulphur dioxide, water vapour, carbon monoxide, oxides of nitrogen, nitrous oxide, particulate matter, and minor emissions of metals and metal compounds and organics. Best practice measures must be employed to minimise any air emissions, noise or dust nuisance that may take place on-site from the proposed activities.
- 6. The applicant is reminded of its "general duty of care towards the environment" as prescribed in section 28 of the NEMA, 1998 which states that "Every person who causes, has caused 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, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."
- 7. The Department reserves the right to revise initial comments and request further information based on any information received.

Yours faithfully

PP HEAD OF DEPARTMENT

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING