

Recommendations for Storm Water Management

for

MOFOKO BROTHERS

Prepared by:

Bucandi Environmental Solutions



Project Manager: H len Prinsloo (*Pr.Sci.Nat.*) Reg. No. 400108/11 (SACNASP)

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1. DETAILED DESCRIPTION OF PROPOSED PROJECT

Mafoko Brothers is proposing the construction of a piggery with capacity for 6 000 pigs (including weaners & sows) in total on Portion 5 of the farm Verlies 120 JO situated in Lichtenburg District within the Ditsobotla Local Municipality area. The need for a Basic Assessment is triggered by Listing 1; (ACTIVITY NO. 4) The development and related operation of facilities or infrastructure for the concentration of animals in densities that exceed (ii) 8 square meters per small stock unit and; a) more than 250 pigs per facility excluding piglets that are not yet weaned. (ACTIVITY NO. 27) The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation. Bucandi Environmental Solutions (Bucandi) was requested by Mafoko Brothers to conduct a Basic Assessment as part of the application for environmental authorisation.

Approved Engineer and Design drawings have not been finalised for the proposed development. These drawings will stipulate the location and of drainage ditches and any other storm water related infrastructure. This report is therefore limited to making recommendation regarding the management and mitigation measures to be incorporated in stormwater control in order to prevent pollution of surface water.

2. OBJECTIVES OF STORM WATER CONTROL

- a) To reduce the potential impact on surface water run-off.
- b) To ensure that the surface water run-off quality does not impact on the area and receiving environment.
- c) To reduce erosion and contamination of surface water by effective storm water control.

3. STORM WATER CONTROL MANAGEMENT MEASURES

- a) Before any construction takes place the proposed area for the development should be pegged out. All construction activities should take place within these areas in order to reduce the footprint of the proposed activity and therefore the potential impact on surface water run-off.
 - b) Storm water related infrastructure should be inspected on a regular basis in order to ensure that the structures are functional and do not cause soil erosion.
 - c) Effective storm water measures should be implemented to minimise soil erosion, such as:
 - The storm water drainage system must be maintained (free-draining) and not contaminated by other waste sources. Storm water must be kept separate from the sewage or any other effluent system.
 - Storm water must be diverted away from bird holding areas, chemical storage areas and wastewater treatment areas.
 - Erosion prevention structures or vegetation should be placed at concentration points to reduce water velocity within the drainage system.
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