Recommendations for Storm Water Management

for

MEDIRO

Prepared by:

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1. DETAILED DESCRIPTION OF PROPOSED PROJECT

Mediro Association is proposing the construction of 6 poultry houses with the capacity to hold up to 10 000 birds per house on Portion 44 (portion of portion 27 of the farm Lanric 59 JO situated in Mahikeng District within the Mahikeng Local Municipality area.

The activity will entail the construction of 6 environmentally controlled chicken layer houses (70m x 6m each). Each house will have the capacity for 10 000 layers. The entire site will be able to house up to 60 000 broiler chicks.

The project will entail the following:

- Earthworks and clearing of vegetation (1.5ha of indigenous vegetation) on the site for 6 poultry houses.
- Construction of 6 environmentally controlled chicken houses (70m x 6m) with capacity for 10 000 birds per house, totalling 60 000 birds.
- A silo and water tank will be erected next to each house.
- Powerlines will be connected to each house from the existing Eskom point.
- Pipelines will be connected to each house from an existing borehole.

The site will be fenced off with a 2.4m high electric fence..

Approved Enigneer 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.