water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

DAM SAFETY OFFICE

PRIVATE BAG X313 PRETORIA 0001

APPLICATION FOR CLASSIFICATION OF A PROPOSED NEW DAM OR ENLARGEMENT OR ALTERATION OF AN EXISTING DAM

Only applicable if the maximum wall height of the dam exceeds 5 metres and the gross storage capacity is more than 50 000 cubic metres

1. PARTICULARS OF THE DAM OWNER

1.1. Name of dam owner

1.2. Owner's postal address

Postal code

1.3. Tel/cel. no. of dam owner

1.4. E-mail address of person in control of the dam

1.5 Name and postal address of person in control of the dam (*if applicable*)

Postal code

1.6. Tel/cel. no. of person in control of the dam

1.7. E-mail address of person in control of the dam

2. PROPERTY ON WHICH THE DAM IS OR WILL BE SITUATED AND LOCALITY

2.1. Property description as per title deed

2.2. Magisterial district

2.3. Nearest city/town

2.4. Distance to nearest city or town km

2.5. Direction from nearest city or town

2.6. Number of 1:50 000 scale topographical map *

* ***A copy of the relevant portion of this map which clearly indicates the position of the dam and downstream area must be attached***

2.7. Position of the centre of the dam wall to an accuracy of one second

Latitude: ° ' " Longitude: ° ' "

2.8. Title deed number

3. GENERAL INFORMATION

3.1. Name of dam

3.2. Name of watercourse or source

3.3. For **clean water** dams, give the purpose of the dam (*mark **all** applicable purposes with X*)

domestic supply		irrigation		industrial use	
stock watering		fisheries		other (specify below)	

Describe "other"

3.4. For **wastewater** dams, give the purpose of the dam (*mark **all** applicable purposes with X*)

pollution control		wastewater disposal		industrial residue	
oxidation / evaporation		mine residue		other (specify below)	

Describe "other"

3.5. For an existing dam describe the nature and extent of the proposed alterations or enlargements

3.6. Proposed starting date of construction YYYY MM

3.7. Name and postal address of designer or consultant (*if available*)

Postal code

3.8. Tel. no. of designer or consultant

3.9. E-mail adress of designer or consultant

4. PARTICULARS OF DAM AND BASIN

(***For enlargement or alteration of an existing dam, particulars must be for the completed structure***)

4.1. Type of dam (*mark applicable type with X - mark more than one for composite dams*)

earthfill		rockfill		gravity	
buttress		arch		multi-arch	
earth "service" reservoir				reinforced concrete "service" reservoir	
mine residue deposit *				industrial residue deposit *	

**** This also means any structure generally termed a "tailings or slimes dam"***

other (*specify*)

4.2. Maximum wall height ** , m

***** Note! Wall height is the vertical difference between the lowest downstream ground elevation on the outside of the dam wall and the non-overspill crest level or the general top level of the dam wall***

4.3. Crest length of wall m

4.4. Gross storage capacity m^3

4.5. Area of water surface at full supply level , ha

4.6. Maximum full supply water depth (*must be provided*) , m

5. PARTICULARS OF DEVELOPMENT DOWNSTREAM OF THE DAM

Describe with the aid of a 1:50 000 scale map the nature and situation of development downstream of a dam that would be threatened by a failure of the dam. Development means any houses, dwellings, other buildings, roads, bridges, cultivated lands, orchards, powerline foundations etc.

The area downstream of the dam wherein all development must be described is defined as follows;

- For every one metre of maximum wall height, at least one kilometre of the valley downstream of the dam wall should be analysed

- For the calculation of the width of the strip the following heights above river bed may be assumed;

2/3 of maximum wall height for the first kilometre downstream and 1/2 of the maximum wall height for the rest of the downstream distance

5.1. Development downstream of the dam (houses, dwellings and other similar structures)

Distance downstream (km)	Purpose or use of structure	Height above river bed (m)	Distance from river (m)	Number of inhabitants or users

5.2. Road and railway crossings downstream of the dam

Distance downstream (km)	(1) Type of road or railway	If a road, is it tarred? (Y/N)	Height of road / railway above river bed (m)	Bridge, culvert or pipe openings				(2) Type of crossing	(3) Visibility distance (m)	Number of vehicles per day
				Width (mm)	Height (mm)	Diameter (mm)	How many?			
			,						i ii	
			,						i ii	
			,						i ii	
			,						i ii	
			,						i ii	
			,						i ii	

(1) *Type of road or railway - Use one of the following abbreviations*

NRD = national road *MRD = main road* *SRD = secondary road* *DRD = district road*

FRD = farm road *STR = single track railway* *MTR = multi-track railway*

Explain other abbreviations =

(2) *Type of crossing - Use one of the following abbreviations*

C = culverts or pipes encased in concrete *E = culverts or pipes buried in earthfill or rockfill*

B = concrete bridge with piers *D = drift with same height as river bed*

Explain other abbreviations =

(3) *Visibility distance - This is the distance to a bridge or crossing from where a motorist can see if there is any danger in using the bridge or crossing. Both approach distances are required.* ***The order in which i and ii are written does not matter.***

If the distance equals or exceeds 1 kilometre, enter 999

5.3. Other development downstream of the dam, not covered by 5.1 or 5.2

6. DECLARATION BY APPLICANT

I declare that the information given by me for the classification of the above dam is true and correct.

Signature: ..... Date: .....

NB! Remember to attach a clear copy of the relevant topographical map (see 2.6)