

SUPPLEMENTARY WATER USE INFORMATION STORING WATER DAM AND BASIN TECHNICAL DATA

SPECIAL NOTE			
 In the following two cases: A proposed dam which has not yet been classified, or An existing dam which will be enlarged by increasing the gross storage capacity, dam classification <i>must</i> take place before the licence application. In these cases, complete <i>only</i> parts 1, 2, 3, and 4 of this form, and complete form DW793 (<i>Dam Classification</i>). 			
1. GENERAL			
1.1 Name of the dam: 1.1 Name of the dam: 1.2 If the water is to be stored in a watercourse, then enter the name of the watercourse: 1.3 For off-channel storage, enter the name of the watercourse to which the water would naturally drain:			
1.4 For clean water dams, give the purpose of the dam: (mark applicable purpose with X – mark more than one for multi-purpose dams): Domestic supply Fisheries Industrial use Irrigation Stock watering Other (specify below) Describe "other"			
1.5 For wastewater dams, give the purpose of the dam: (mark applicable purpose with X – mark more than one for multi-purpose dams): Pollution control Wastewater disposal Industrial residue Oxidation or evaporation Mine residue Other (specify below) Describe "other" Oxidation			
1.6 Person in control of the dam a) Surname and initials b) Contact telephone number Area/cell code Image: Area/cell code Image: Area/cell for day-to-day operation of the dam			
a) Surname and initials b) Contact telephone number Area/cell code			

2. COMPLETION DATE AND LOCATION OF DAM				
2.1 Date of completion or proposed completion of the dam: $\begin{array}{c c} Y & Y & Y & M & M & D \\ \hline \end{array}$				
2.2 Nearest city or town				
2.3 Distance from nearest city or town:				
2.4 Direction to dam from nearest city or town:				
2.5 Number of 1:50 000 scale topographic map (or 1:10 000 orthophoto): ()) (attach a copy of the relevant portion of this map, with the position of the dam clearly marked)				
2.6 Geographic position of centre of dam wall:				
S o o o o o o o o o cape datum Clarke WGS-84 datum E 0 o 0 0 0 0 0 0 0 WGS-84 datum 0				
3. CLASSIFICATION INFORMATION				
3.1 Has the dam been classified? Yes No (if <i>no</i> , please complete form DW793 - <i>Dam Classification</i>)				
If the dam has been classified, then complete the following:				
Date of classification of the dam				
Category classification (mark one with <i>X</i>)				
Size class (mark one with X) Small Medium Large				
Hazard potential rating (mark one with X) Low Significant High				
4. DAM STRUCTURE AND DAM BASIN				
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 reservoir Industrial residue deposit * Reinforced concrete reservoir				
Mine residue deposit * * These structures include tailings				
Other (specify)				
4.2 Size of dam Maximum wall height ** metres				
** "wall height" is the vertical difference between the lowest downstream ground elevation on				
the dam wall and the non-overspill crest level or the general top level of the dam wall				
Gross storage capacity thousand cubic metres				
Water surface area at full supply level hectares				

5. DIMENSIONS OF DAM AND DESCRIPTION OF MATERIALS					
5.1	Crest length of wall ***	metres			
	*** The length of the crest includes the length of the spillway, where applicable.				
5.2	Crest width of wall (minimum)	. metres			
5.3	Base width of wall (maximum)	metres			
5.4	Upstream slope, e.g. 1.0 V : 3.0 H	1.0 V : H			
5.5	Downstream slope, e.g. 1.0 V : 2.25 H	1.0 V : H			
5.6	Type of upstream slope protection (e.g. rock, stone, etc.)				
5.7	Type of downstream slope protection (e.g. grass, gravel, etc.)				
	General description of the construction materials for	r use in the different zones of the wall:			
	Zone De	escription			
6. DA	AM BASIN CHARACTERISTICS				
6.1 V	Water depth at full supply level	. metres			
6.2 F	For off-stream storage, select the dam basin shape:				
	Triangular σ Rectangular v Circ	cular λ Branched Y			
	Other (specify):				
	For in-stream storage, select the shape below that is most similar t				
((in these diagrams, flow is from left to right and the symbol show	-			
	a) b) c	c) d)			
	or or	or or			
<i>(</i>))					
6.4 Dam basin dimensions:					
1 2	 a) Length (or diameter if round) b) Width (leave blank if round) c) metres <lic) li="" metres<=""> c) metres <li c)="" li="" metres<=""> <l< td=""></l<></lic)>				

7. F	LOOD HYDROLOGY					
7.1	Catchment area			[†] square kilom	etres	
	^{\dagger} for catchment areas less than 20 km ² , enter the area to the nearest 0.1 km ²					
7.2	Recurrence interval of design flood			years		
7.3	Design flood			cubic metres	/ second	
7.4	Regional maximum flood (RMF)			cubic metres	/ second	
7.5	Probable maximum flood (PMF)			cubic metres	/ second	
8. S	PILLWAY					
8.1	Main spillway details					
	a) Type of spillway (mark applicable type with X – mark more than o	ne if ne	ecessary):		(1' 1)	
	Free fall (straight drop) Ogee (overflow)			Chute		
	Stepped Open channel			Side c	hannel	
	Conduit By-wash				Shaft	
	Culvert Labyrinth			Chute (baffle		
	Morning glory Siphon			0	ascade	
	Drop inlet Other (describe)					
	b) Total freeboard (difference between non-overspill crest level and f	full sup	ply level)	•	metres	
	c) Dry freeboard (difference between non-overspill crest level and de	esign flo	pod level)	•	metres	
	d) Width of spillway channel at full supply level				metres	
	e) Width of spillway channel at non-overspill crest level				metres	
	f) Effective crest length of spillway				metres	
	g) Discharge capacity of spillway with "zero" freeboard				m ³ /sec	
	h) Length of spillway channel				metres	
	j) Slope of spillway channel as a ratio of height to distance (e.g. 1.0V	V:40.0	H)	1.0 V :		Н
	k) Non-overspill crest level			•	metres	
	l) Spillway crest level (full supply level)			•	metres	
	m)Riverbed or lowest ground level immediately downstream of dam	wall		•	metres	
	n) Description of spillway gates, if any					
	o) Type of energy dissipator, if any					
8.2	Auxiliary or second spillway (if any): details					
	a) Location of auxiliary spillway					
	b) Auxiliary spillway nature or type					
	c) Auxiliary spillway crest level			•	metres	
	d) Effective crest length of auxiliary spillway				metres	
8.3	Does the dam structure incorporate a fish ladder or fish way?		Yes		No	

9. OUT	LET PIPE OR PIPES
9.1	Number of outlet pipes
9.2	Diameter of outlet pipe number 1 mm
	Height of outlet pipe above river bed metres
	Is pipe encased in concrete? Yes No
	Location of control point such as valve Downstream Upstream
	Is there an upstream emergency gate, service gate or closure mechanism? Yes No
9.3	Diameter of outlet pipe number 2 mm
	Height of outlet pipe above river bed . metres
	Is pipe encased in concrete? Yes No
	Location of control point such as valve Downstream Upstream
	Is there an upstream emergency gate, service gate or closure mechanism? Yes Ves Ves
9.4	Diameter of outlet pipe number 3 mm
	Height of outlet pipe above river bed metres
	Is pipe encased in concrete? Yes No
	Location of control point such as valve Downstream Upstream
	Is there an upstream emergency gate, service gate or closure mechanism? Yes No
9.5	Diameter of outlet pipe number 4 mm
	Height of outlet pipe above river bed
	Is pipe encased in concrete? Yes No
	Location of control point such as valve Downstream Upstream
	Is there an upstream emergency gate, service gate or closure mechanism? Yes No
9.6	Description of outlet works if more complex than pipes encased in reinforced concrete
	(e.g. intake tower; multiple drawoff pipe, intake tower with pipes in a tunnel)
9.7	Time to draw down the dam to different percentages of water depth between full supply level
	and the lowest intake level
	90% days 80% days 60% days 10% days
10. SEI	EPAGE
10.1 Se	epage control measures (mark with an X)
	Cut-off trench Grout curtain Chimney drain Blanket drain
	Finger drains Toe drain Rockfill toe Drain holes
	Pressure relief wells None Other (describe below)

11. GEOLOGY				
11.1 The general nature of the materials forming the foundation of the dam:				
a)Left bank				
b)River bed				
c)Right bank				
d)Spillway				
12. GENERAL				
12.1 Additional information with respect to spillway, outlet works, seepage control measures, geology, or any				
geotechnical aspects				
geoteeninear aspects				

FOR OFFICIAL USE ONLY					
File number					
Water use licence or registra	Water use licence or registration number				
Water Management Area					
Received by:					
Surname		Initial	s		
Rank					
Signature					
Captured by:					
Initials					
			Date stamp of receiving office		