
GOVERNMENT NOTICE

DEPARTMENT OF WATER AFFAIRS

No. R. 890

1 September 2009

NATIONAL WATER ACT, 1998

DRAFT REGULATIONS REGARDING THE SAFETY OF DAMS UNDER SECTION 123(1) OF THE NATIONAL WATER ACT, 1998

The Minister of Water and Environmental Affairs intends under section 123(1) of the National Water Act, 1998 (Act No. 36 of 1998), to make the Regulations in the Schedule relating to the safety of dams.

The Regulations promulgated by Government Notice R 1560 of 25 July 1986, will be repealed.

In terms of section 69(1) (a) (ii) of the National Water Act, 1998, interested parties are invited to submit written comments in connection with the proposed Regulations before 30 November 2009 to the Director-General: Water Affairs, Private Bag X313, Pretoria, 0001; Fax No. (012) 336-8674; e-mail: modipanes@dwaf.gov.za, for the attention of the Dam Safety Office or Ms M S Modipane.



Ms Pam Yako

DIRECTOR-GENERAL

Letter signed by: Ms N Ngele

Designation: Director-General (Acting)

Date: 4/8/09

SCHEDULE

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Definitions

1. In these Regulations any word or expression to which a meaning has been assigned in the Act shall have that meaning and, unless the context otherwise indicates –
 - (1) **“alter a dam with a safety risk”** means significant construction work to alter components or sections of the dam that may have an impact on the safety of the dam, but excluding normal maintenance or refurbishment work;
 - (2) **“approved professional person”** means a person registered in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000), and approved by the Minister after consultation with the Engineering Council of South Africa (established by section 2 of that Act);
 - (3) **“catchment parameters”** includes the average slope of the longest watercourse, average slope of the catchment area, catchment shape and distance to its centre of gravity, vegetation type and coverage and particulars of dolomitic or endorheic areas;
 - (4) **“completion certificate”** means a written statement issued by the approved professional person confirming that construction work, in his or her view, has been completed in accordance with the applicable design, drawings and specifications;
 - (5) **“condition affecting the safety of a dam”** means any condition of or event in respect of a dam with a safety risk, or a component thereof, including –
 - (a) significant damage of the dam wall or spilling caused by natural phenomena such as floods and earthquakes;
 - (b) failure or unusual movements or subsidence of any part of the dam or foundation thereof;
 - (c) unusual seepage or leaks which occur or which increase abnormally in the course of time or which remove material;
 - (d) defects in the dam wall or its components, which could in the course of time lead to a failure of the dam;
 - (e) deterioration of the dam wall or the forming of cracks, including the starting of new cracks or the lengthening or widening of existing cracks;
 - (f) the occurrence of sinkholes in the dam wall or reservoir;
 - (g) the movement of material masses near the perimeter of the reservoir;
 - (h) unusual instrument readings;
 - (i) significant damage to slope protection;
 - (j) unserviceability of spillways and floodgates;
 - (k) unserviceability of outlet works required for lowering of the water level in an emergency; and
 - (l) incidents of sabotage or vandalism,

which poses a threat to the safety of the dam or holds a risk of loss of life, economic loss, or detrimental effect to resource quality, or is likely to pose a threat or hold any risk, or is likely to develop into any condition or event;

- (6) **"dam"** includes any existing or proposed structure which is capable of containing, storing or impounding water (including temporary impoundment or storage), whether that water contains any substance or not;
- (7) **"dam with a safety risk"** means any dam –
- (i) which can contain, store or dam more than 50 000 cubic metres of water, whether that water contains any substance or not, and which has a wall of a vertical height of more than five metres, measured as 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;
 - (ii) belonging to a category of dams declared under section 118(2) of the Act to be dams with a safety risk; or
 - (iii) declared under section 118(3)(a) of the Act to be a dam with a safety risk;
- (8) **"decision recommendation"** means the advice given to a decision-maker by an approved professional person as to which of a range of alternative courses of action should be preferred, based on factors that fall within the area of responsibility and competence of the approved professional person;
- (9) **"decommission a dam with a safety risk"** means taking steps to ensure that the remaining structure will, without any further operational action, maintenance, inspection or safety evaluation, hold no danger or potential danger to human life or property, have no significant adverse impact on resource quality, or significant detrimental effect on the environment;
- (10) **"development"** includes houses, dwellings, churches, places of worship, schools, factories, buildings, roads, bridges, river crossings, railway lines, dams, canals, pipelines, power lines, telephone lines, other lines of communication, other infrastructure, cultivated lands, orchards, or any land use;
- (11) **"emergency"** means an imminent, expected, foreseen, anticipated or actual sudden release of water from a dam with a safety risk as a result of a natural disaster, an accident, a condition affecting the safety of the dam, or failure of the dam or a part thereof;
- (12) **"emergency preparedness plan"** means formal documents that identify potential emergency conditions at a dam and which specify pre-planned actions to be followed to minimise loss of life, damage to property and adverse effects on resource quality: and –
- (a) describe actions that the owner of the dam with the safety risk, or person in control, must take to address safety problems at the dam;
 - (b) contains appropriate procedures and information to assist the owner of the dam in issuing early warning notification messages to responsible disaster management authorities, representatives of local authorities, representative bodies or of any communities potentially threatened by the condition of the dam and with whom arrangements have been made in connection with the issue of warnings; and
 - (c) contains engineering drawings of the dam and inundation maps to show disaster management authorities critical areas for action in case of an emergency.