

BUREAU OF INDIAN STANDARDS

Program of Work

WRD 9 : Dams and Spillways

Scope: Standardization of criteria for planning, design, construction, maintenance and related aspects of various types of dams and spillways.

Liaison:

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 10135 : 1985 Reviewed In : 2020	Code of practice for drainage system for gravity dams, their foundations and abutments (First Revision)	March, 2020	-	Indigenous
2	IS 10137 : 2015 Reviewed In : 2020	Guidelines for selection of spillways and energy dissipators (First Revision)	March, 2020	-	Indigenous
3	IS 10635 : 2014 Reviewed In : 2020	Freeboard requirement in dams - Guidelines (Second Revision)	February, 2020	-	Indigenous
4	IS 11155 : 2019 Reviewed In : 2020	Construction of spillways and similar overflow structures - Code of practice (Second Revision)	January, 2020	-	Indigenous
5	IS 11216 : 1985 Reviewed In : 2023	Code of practice for permeability test for masonry during and after construction	October, 2023	-	Indigenous
6	IS 11223 : 1985 Reviewed In : 2020	Guidelines for fixing spillway capacity	March, 2020	2	Indigenous
7	IS 11485 : 2014 Reviewed In : 2020	Criteria for design of sluices in concrete and masonry dams (First Revision)	February, 2020	-	Indigenous
8	IS 11527 : 2013 Reviewed In : 2020	Structural design of energy dissipators for spillways - Criteria (First Revision)	March, 2020	-	Indigenous
9	IS 11772 : 2009 Reviewed In : 2023	Design of drainage arrangements of energy dissipators and training walls of spillways - Guidelines (First Revision)	October, 2023	-	Indigenous
10	IS 12169 : 1987 Reviewed In : 2020	Criteria for design of small embankment dams	January, 2020	1	Indigenous
11	IS 12200 : 2001 Reviewed In : 2023	Provision of water - Stops at transverse contraction joints in masonry and concrete dams - Code of practice (First Revision)	October, 2023	-	Indigenous
12	IS 12720 : 2004 Reviewed In : 2020	Criteria for structural design of spillway training walls and divide walls (Second Revision)	March, 2020	-	Indigenous
13	IS 12731 : 1989 Reviewed In : 2020	Hydraulic design of impact type energy dissipators -	March, 2020	-	Indigenous

		Recommendations			
14	IS 12804 : 1989 Reviewed In : 2020	Criteria for estimation of aeration demand for spillway and outlet structures	March, 2020	-	Indigenous
15	IS 12966 (Part 1) : 1992 Reviewed In : 2020	Code of practice for galleries and other openings in dams: Part 1 general requirements	January, 2020	-	Indigenous
16	IS 12966 (Part 2) : 2024	GALLERIES AND OTHER OPENINGS IN DAMS - CODE OF PRACTICE : PART 2 STRUCTURAL DESIGN		-	Indigenous
17	IS 12966 (Part 2) : 1990 Reviewed In : 2023	Code of practice for galleries and other openings in dams: Part 2 structural design	October, 2023	-	Indigenous
18	IS 13048 : 1991 Reviewed In : 2020	Recommendations for hydraulic design of duck bill spillways	March, 2020	-	Indigenous
19	IS 13144 : 1991 Reviewed In : 2023	Recommendations for provision of facilities outside the dams	October, 2023	-	Indigenous
20	IS 13195 : 1991 Reviewed In : 2020	Preliminary design, operation and maintenance of protection works downstream of spillways - Guidelines	March, 2020	-	Indigenous
21	IS 13551 : 1992 Reviewed In : 2023	Structural design of spillway pier and crest - Criteria	October, 2023	-	Indigenous
22	IS 13645 : 1993 Reviewed In : 2023	Guniting the upstream face of masonry dams - Guidelines	October, 2023	1	Indigenous
23	IS 14591 : 1999 Reviewed In : 2020	Temperature control of mass concrete for dams - Guidelines	March, 2020	-	Indigenous
24	IS 14690 : 1999 Reviewed In : 2020	Quality control during construction of earth and rockfill dams - Recommendations	March, 2020	-	Indigenous
25	IS 14954 : 2001 Reviewed In : 2021	Distress and remedial measures in earth and rockfill dams - Guidelines	March, 2021	-	Indigenous
26	IS 15058 : 2002 Reviewed In : 2023	PVC water - Stops at transverse contraction joints for use in masonry and concrete dams - Specification	October, 2023	1	Indigenous
27	IS 17837 : 2022	Junction of Earth Earth Core Rockfill Dam with Spillways NOF Dams Foundations and Outlets Guidelines		-	Indigenous
28	IS 18662 : 2024	PLANNING AND STRUCTURAL DESIGN OF CONCRETE FACE ROCKFILL DAM - GUIDELINES		-	Indigenous
29	IS 4410 (Part 8) : 1992 Reviewed In : 2020	Glossary of terms relating to river valley projects: Part 8 dams and dam: Section (First Revision)	January, 2020	-	Indigenous
30	IS 4410 (Part 9) : 1982 Reviewed In : 2021	Glossary of terms relating to river valley projects: Part 9 spillways and siphons (First Revision)	March, 2021	-	Indigenous
31	IS 4410 (Part 18) : 1983 Reviewed In : 2021	Glossary of terms relating to river valley projects: Part 18 energy dissipation devices (Stilling Basins)	March, 2021	-	Indigenous
32	IS 4997 : 1968 Reviewed In : 2020	Criteria for design of hydraulic jump type stilling basins with horizontal and sloping apron	March, 2020	1	Indigenous
33	IS 5186 : 1994	Design of chute and side channel	February, 2020	1	Indigenous

	Reviewed In : 2020	spillways - Criteria (First Revision)			
34	SP 55 : 1993 Reviewed In : 2020	Design aid for anchorages for spillway piers, training walls and divide walls	March, 2020	-	Indigenous
35	IS 6512 : 2019 Reviewed In : 2020	Criteria for design of solid gravity dams (Second Revision)	January, 2020	-	Indigenous
36	IS 6934 : 2024	HYDRAULIC DESIGN OF OGEE OVERFLOW AND ORIFICE SPILLWAYS - RECOMMENDATIONS Third Revision		-	Indigenous
37	IS 7365 : 2010 Reviewed In : 2020	Criteria for hydraulic design of bucket type energy dissipators (Second Revision)	February, 2020	-	Indigenous
38	IS 7894 : 1975 Reviewed In : 2020	Code of practice for stability analysis of earth dams	January, 2020	1	Indigenous
39	IS 8605 : 1977 Reviewed In : 2023	Code of practice for construction of masonry in dams	October, 2023	1	Indigenous
40	IS 8826 : 1978 Reviewed In : 2020	Guidelines for design of large earth and rockfill dams	January, 2020	1	Indigenous
41	IS 9296 : 2001 Reviewed In : 2023	Inspection and maintenance of dams and appurtenant structures - Guidelines (First Revision)	October, 2023	-	Indigenous
42	IS 9297 : 1979 Reviewed In : 2023	Recommendations for lighting, ventilation and other facilities inside dams	October, 2023	2	Indigenous
43	IS 9429 : 1999 Reviewed In : 2020	Drainage system for earth and rockfill dams - Code of practice (First Revision)	January, 2020	-	Indigenous

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Preliminary Draft Standards

SI. No.	Doc No.	Title
1	WRD 9 (26569) Revision of: IS 8605:1977	Construction of Masonry in Dams Code of Practice
2	WRD 9 (26640) Revision of: IS 13144:1991	Provision of Facilities Outside the Dams Recommendations

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
1	WRD 9 (26616) Revision of: IS 12804:1989	Hydraulic Design of Spillway Aerators Guidelines

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	WRD 9 (26589) Revision of: IS 12804:1989	Criteria for Design of Hydraulic Jump Type Stilling Basins with Horizontal and Sloping Apron

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	WRD 9 (24572) Revision of: IS 9297:1979	Lighting Ventilation and Other Facilities Inside Dams Recommendations

Total Published Standards:41 Total Standards Under development:5

Aspect Wise Report

Product : 1
Code of Practices : 35
Methods of Test : 0
Terminology : 3
Dimensions : 0
System Standard : 0
Safety Standard : 0
Others : 3
Service Specification : 0
Process Specification : 0
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
<i>No Records Found</i>		

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 15058 : 2002 Reviewed In : 2023	PVC water - Stops at transverse contraction joints for use in masonry and concrete dams - Specification