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	Code of practice for drainage	March, 2020	-	Indigenous
	Reviewed In: 2020	system for gravity dams, their			
		foundations and abutments (First			
		Revision)			
2	IS 10137 : 2015	Guidelines for selection of	March, 2020	=	Indigenous
		spillways and energy dissipators			
	Reviewed In: 2020	(First Revision)			
3	IS 10635 : 2014	Freeboard requirement in dams -	February, 2020	=	Indigenous
	Reviewed In: 2020	Guidelines (Second Revision)			
4	IS 11155 : 2019	Construction of spillways and	January, 2020	-	Indigenous
		similar overflow structures - Code			
	Reviewed In: 2020	of practice (Second Revision)			
5	IS 11216 : 1985	Code of practice for permeability	October, 2023	-	Indigenous
	Reviewed In: 2023	test for masonry during and after			
		construction			
6	IS 11223 : 1985	Guidelines for fixing spillway	March, 2020	2	Indigenous
	Reviewed In: 2020	TITLE Code of practice for drainage system for gravity dams, their foundations and abutments (First Revision) Guidelines for selection of spillways and energy dissipators (First Revision) Freeboard requirement in dams - Guidelines (Second Revision) Construction of spillways and similar overflow structures - Code of practice (Second Revision) Code of practice for permeability test for masonry during and after construction Guidelines for fixing spillway capacity Criteria for design of sluices in concrete and masonry dams (First Revision) Structural design of energy dissipators for spillways - Criteria (First Revision) Design of drainage arrangements of energy dissipators and training walls of spillways - Guidelines (First Revision) Criteria for design of small embankment dams Provision of water - Stops at transverse contraction joints in masonry and concrete dams - Code of practice (First Revision) Criteria for structural design of spillway training walls and divide walls (Second Revision) Hydraulic design of impact type			
7	IS 11485 : 2014	Criteria for design of sluices in	February, 2020	-	Indigenous
	Reviewed In: 2020	Revision)			
8	IS 11527 : 2013	Structural design of energy	March, 2020	-	Indigenous
	Reviewed In: 2020	dissipators for spillways - Criteria			_
		(First Revision)			
9	IS 11772 : 2009	Design of drainage arrangements	October, 2023	-	Indigenous
	Reviewed In: 2023				
		walls of spillways - Guidelines			
		(First Revision)			
10	IS 12169 : 1987		January, 2020	1	Indigenous
	Reviewed In: 2020	embankment dams	•		
11	IS 12200 : 2001		October, 2023	-	Indigenous
	Reviewed In: 2023	transverse contraction joints in			-
		ě .			
		•			
12	IS 12720 : 2004		March, 2020	-	Indigenous
	Reviewed In: 2020		•		C
13	IS 12731 : 1989		March, 2020	-	Indigenous
	Reviewed In: 2020		•		J

		Recommendations			
14	IS 12804 : 1989	Criteria for estimation of aeration	March, 2020	-	Indigenous
	Reviewed In: 2020	demand for spillway and outlet			C
		structures			
15	IS 12966 (Part 1):	Code of practice for galleries and	January, 2020	-	Indigenous
	1992	other openings in dams: Part 1			
	Reviewed In: 2020	general requirements			
16	IS 12966 (Part 2):	Code of practice for galleries and	October, 2023	-	Indigenous
	1990	other openings in dams: Part 2			
	Reviewed In: 2023	structural design			
17	IS 13048 : 1991	Recommendations for hydraulic	March, 2020	-	Indigenous
	Reviewed In: 2020	design of duck bill spillways		<u> </u>	
18	IS 13144 : 1991	Recommendations for provision of	October, 2023	-	Indigenous
	Reviewed In: 2023	facilities outside the dams			
19	IS 13195 : 1991	Preliminary design, operation and	March, 2020	-	Indigenous
	Reviewed In: 2020	maintenance of protection works			
		downstream of spillways -			
		Guidelines			
20	IS 13551 : 1992	Structural design of spillway pier	October, 2023	-	Indigenous
0.1	Reviewed In : 2023	and crest - Criteria	0 . 1 . 2022	1	Y **
21	IS 13645 : 1993	Guniting the upstream face of	October, 2023	1	Indigenous
22	Reviewed In : 2023	masonry dams - Guidelines	37 1 2020	 	Y 1'
22	IS 14591 : 1999	Temperature control of mass	March, 2020	-	Indigenous
22	Reviewed In: 2020	concrete for dams - Guidelines	37 1 2020		y 11
23	IS 14690 : 1999	Quality control during construction	March, 2020	-	Indigenous
	Reviewed In: 2020	of earth and rockfill dams -			
24	TG 14054 2001	Recommendations	1 2021		7 II
24	IS 14954 : 2001	Distress and remedial measures in	March, 2021	-	Indigenous
	Reviewed In: 2021	earth and rockfill dams -			
25	IC 15050 2002	Guidelines	0-4-1 2022	1	T., 1'
25	IS 15058 : 2002	PVC water - Stops at transverse	October, 2023	1	Indigenous
	Reviewed In: 2023	contraction joints for use in			
		masonry and concrete dams -			
26	10 17027 2022	Specification Specification			τ 1'
26	IS 17837 : 2022	Junction of Earth Earth Core		-	Indigenous
		Rockfill Dam with Spillways NOF			
		Dams Foundations and Outlets			
27	IC 4410 (D + 0)	Guidelines	1 2020	+	τ 1'
27	IS 4410 (Part 8):	Glossary of terms relating to river	January, 2020	-	Indigenous
	1992	valley projects: Part 8 dams and			
20	Reviewed In: 2020	dam: Section (First Revision)	Morel 2021	+	Indiana
28	IS 4410 (Part 9) : 1982	Glossary of terms relating to river	March, 2021	-	Indigenous
	1982 Reviewed In : 2021	valley projects: Part 9 spillways			
29	IS 4410 (Part 18):	and siphons (First Revision) Glossary of terms relating to river	March, 2021	+	Indigenous
29	15 4410 (Part 18): 1983	-	ivial CII, 2021	-	murgenous
		valley projects: Part 18 energy dissipation devices (Stilling Basins)			
30	IS 4997 : 1968	Criteria for dbsign of hydraulic	March, 2020	1	Indigenous
30	Reviewed In : 2020	jump type stilling basins with	ivialuli, 2020	1	murgenous
	ACVICACU III . 2020	horizontal and sloping apron			
31	IS 5186 : 1994	Design of chute and side channel	February, 2020	1	Indigenous
91		spillways - Criteria (First Revision)	1 coruary, 2020	1	murgenous
32	SP 55 : 1993	Design aid for anchorages for	March, 2020		Indigenous
5∠	Reviewed In : 2020	spillway piers, training walls and	14141011, 2020		murgenous
	ixevieweu iii . 2020	divide walls			
33	IS 6512 : 2019	Criteria for design of solid gravity	January, 2020	1	Indigenous
رر	15 0512 . 2019	dams (Second Revision)	January, 2020		murgenous
	Reviewed In: 2020	danis (Second Revision)			
34	IS 6934 : 2024	HYDRAULIC DESIGN OF		_	Indigenous
1 14					

		OGEE OVERFLOW AND ORIFICE SPILLWAYS - RECOMMENDATIONS Third Revision			
35	IS 7365 : 2010 Reviewed In : 2020	Criteria for hydraulic design of bucket type energy dissipators (Second Revision)	February, 2020	-	Indigenous
36	IS 7894 : 1975 Reviewed In : 2020	Code of practice for stability analysis of earth dams	January, 2020	1	Indigenous
37	IS 8605 : 1977 Reviewed In : 2023	Code of practice for construction of masonry in dams	October, 2023	1	Indigenous
38	IS 8826 : 1978 Reviewed In : 2020	Guidelines for design of large earth and rockfill dams	January, 2020	1	Indigenous
39	IS 9296 : 2001 Reviewed In : 2023	Inspection and maintenance of dams and appurtenant structures - Guidelines (First Revision)	October, 2023	-	Indigenous
40	IS 9297 : 1979 Reviewed In : 2023	Recommendations for lighting, ventilation and other facilities inside dams	October, 2023	2	Indigenous
41	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	
	No Records Found		

		Preliminary Draft Standards		
SI. No.	SI. No. Doc No. Title			
No Records Found				

	Drafts Standards in WC Stage		
SI. No.	SI. No. Doc No. Title		
No Records Found			

Draft Standards Completed WC Stage		
SI. No.	Doc No.	Title
1	WRD 9 (24572)	RECOMMENDATIONS FOR LIGHTING VENTILATION AND OTHER FACILITIES INSIDE
		DAMS

	Finalized Draft Indian Standard		
SI. No.	SI. No. Doc No. Title		
	No Records Found		

	Finalized Draft Indian Standards under Print		
SI. No.	Doc No.	Title	
1	WRD 9 (15557) Revision	HYDRAULIC DESIGN OF SPILLWAY AERATORS GUIDELINES	
	of: IS 12804:1989		
2	WRD 9 (15646) Revision	CRITERIA FOR DESIGN OF HYDRAULIC JUMP TYPE STILLING BASINS WITH	

L		of: IS 4997:1968	HORIZONTAL AND SLOPING APRON First Revision of IS 4997
Γ	3	WRD 9 (15743)	PLANNING AND STRUCTURAL DESIGN OF CONCRETE FACE ROCKFILL DAM -
			GUIDELINES
Γ	4	WRD 9 (19599) Revision	GALLERIES AND OTHER OPENINGS IN DAMS - CODE OF PRACTICE PART 2
l		of: IS 12966:1990	STRUCTURAL DESIGN

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: 2

Service Specification: 0 Process Specification: 0 Unclassified: 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title	
	No Records Found		

Annexure-II : List of Indian Product Standards

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