

Part 501 – Authorizations

Subpart A – Review and Approval

501.8 Engineering Job Classifications That Utilize Controlling Factors

Practice Code	Practice Name	Controlling Factor	Units	Class V	Class VI	Class VII
	Any practice	Hazard potential as defined in 501.7C	class	Low	Significant	High
	Any practice	Alters the visual resources of beaches and shorelines on oceans and the Great Lakes		None	All	All
	Recreation Facilities - Water supply or Sewage Treatment	Onsite daily design capacity	people	200	400	All
		Offsite daily design capacity	people	400	800	All
313	Waste Storage Facility	Storage Capacity	thousand cubic feet	2,000	5,000	All
320	Irrigation Canal or Lateral	Capacity	cubic feet per second	500	1,000	All
348	Dam, Diversion	Streamflow (25-yr)	cubic feet per second	2,000	3,000	All
		Flow diverted	cubic feet per second	200	500	All
		Height of drop	feet	8	15	All
359	Waste Treatment Lagoon	Aerobic surface area	acres	25	50	All
		Anaerobic volume	thousand cubic feet	2,000	5,000	All
350	Sediment Basin	Drainage area	square miles	20	40	50
		Effective height	feet	35	50	75
		Embankment over active fault		None	None	None
402	Dam	Drainage area	square miles	20	40	50
		Effective height	feet	35	50	75
		Embankment over active fault		None	None	None
410	Grade Stabilization Structure	Drainage area	square miles	20	40	50
		Effective height	feet	35	50	75
		Embankment over active fault		None	None	None
430	Irrigation Pipeline	Pipeline capacity < 50 psi maximum pressure	gallons per minute	5,000	All	All
		Pipeline capacity ≥ 50 psi operating pressure	gallons per minute	3,500	All	All

Title 210 - National Engineering Manual

Practice Code	Practice Name	Controlling Factor	Units	Class V	Class VI	Class VII
436	Irrigation Reservoir	Drainage area	square miles	20	40	50
		Effective height	feet	35	50	75
		Embankment over active fault		None	None	None
453	Land Reclamation, Landslide Treatment	Area	acres	1	5	All
		Depth	feet	10	20	All
		Slope	percent	50	All	All
455	Land Reclamation, Toxic Discharge Control	Flow	cubic feet per second	100	1,000	All
516	Livestock Pipeline	Pressure	psi	300	All	All
533	Pumping Plant	Axial flow pump capacity	gallons per minute	50,000	100,000	All
		Centrifugal & turbine pump capacity	gallons per minute	3,500	5,000	All
		Centrifugal pump static head	feet	350	500	All
		Turbine pump static head	feet	500	1,000	All
580	Streambank and Shoreline Protection	Bankfull capacity	cubic feet per second	5,000	20,000	All
		Bankfull velocity	feet per second	10	12	All
		Water height above shoreline	feet	3	5	All
582	Open Channel	Design capacity	cubic feet per second	1,000	2,000	All
		Design velocity	feet per second	10	12	All
584	Channel Bed Stabilization	Design capacity	cubic feet per second	1,000	2,000	All
		Design velocity	feet per second	10	12	All
587	Structure for Water Control	Drainage area	square miles	20	40	50
		Effective height	feet	35	50	75
		Embankment over active fault		None	None	None
608	Surface Drain, Main or Lateral	Design capacity	cubic feet per second	1,000	2,000	All
		Design velocity	feet per second	10	12	All