

SUBPART C – DAMS

§MT528.20 General
(b) cont.

MT528(b)1(e)

Planning Sequence for new dams or repair or rehabilitation of existing dams

During Data Collection and Evaluation

Reference
(for detailed
description of
requirements)

- | | | |
|----|---|------------------|
| 1. | Estimate height and storage. | |
| 2. | Determine NRCS hazard classification and if inventory size. | NEM 520.23(a) |
| 3. | Determine design criteria (Ponds Standard 378 or TR-60). | |
| 4. | Preliminary cost estimate to determine if cooperators wish to continue planning for the dam. (GO/NO GO) | |
| 5. | If storage is \geq 50 acre-feet, assist cooperators in applying for “The Determination of Hazard Classification of Dams and Reservoirs” from DNRC. | State Regulation |
| 6. | Document how NRCS/DNRC classifications were arrived at. | NEM 520.23(b) |
| 7. | If dam is NRCS hazard class (a) and of inventory size, or NRCS hazard class (b) regardless of size (including Job Class IV or less): | |
| a. | Describe potential impact area (inundation area) and document in Step 6 above (in many cases should use breach routing model – consult with state office). | NEM 520.28 |
| b. | Make cooperators aware of potential impact area, and the effect of land use changes within the impact area on the hazard classification. Is the cooperators willing to assume the liability? (GO/NO GO) | NEM 520.28 |
| c. | If assistance is for repair or rehabilitation of a dam built without SCS assistance, the owner or NRCS must analyze condition of the dam and prepare a comprehensive engineering report before any commitment for assistance is made. | NEM 501.23(a, c) |
| d. | Determine if NRCS (Area Conservationist) is able to commit adequate planning, design, and construction quality control time for the dam. (GO/NO GO) | |
| e. | Schedule subsurface investigation (i.e., drill rig). | |

MT528-2(3)

PART 528 – SOIL AND WATER RESOURCES DEVELOPMENT

MT528(b)1(f)

	<u>Reference</u>
f. Cooperator to notify local land use agency/county/state dam safety office/C.D.	NEM 520.28
8. If dam is NRCS hazard class (c) and/or DNRC “high” hazard (including Job Class V or higher):	
a. If assistance is for repair or rehabilitation of a dam built without NRCS assistance, the owner or NRCS must analyze condition of the dam and prepare a comprehensive engineering report before any commitment for assistance is made. If dam exceeds Job Class V, the report is to be prepared by a non-NRCS registered engineer and technically accepted by the SCE and head of TSC Engineering before resources can be committed.	NEM 501.23(b)
b. Determine if NRCS (Area Conservationist and State Conservation Engineer) is able to commit adequate planning, design, and construction control time for the dam. (GO/NO GO)	
c. Schedule subsurface investigation (i.e., drill rig).	
d. If NRCS is unable to assist, suggest a private consultant be retained. If NRCS is able to assist, insure cooperator is aware of cost estimate, projected design and approval time, requirements of the state dam safety regulations, and the degree of construction quality control required. (GO/NO GO)	
<u>Before Construction</u>	
9. The hazard classification of all dams must be verified immediately prior to construction.	NEM 520.23(a)
10. For DNRC “high” hazard dams, a construction permit must be obtained.	State Regulation
11. For NRCS class (c) dams an Emergency Action Plan must be prepared and checked by State Conservationist. Include “map of inundation” (breach routing).	NEM 520.27
12. For inventory size dams: Develop O&M plan as per para 520.20 supplement to NEM and 180-500 of O&M manual.	NEM 520.20 NOMM 500.40

MT528-2(4)

SUBPART C – DAMS

MT528(a)13

Reference

13. Develop a Plan of Inspection. As a minimum, small low-hazard dams require inspection:
- a. Just prior to core trench backfill – Adequacy of cutoff, dewatering backfill methods, etc.
 - b. Start of embankment – Suitable fill material, moisture control, compaction methods, etc.
 - c. During installation of outlet conduit(s) – Watertightness, proper bedding, haunch compaction, and adequate cover of conduit(s) before passage of heavy equipment.
 - d. Final Inspection – Before equipment is removed, who will be present, etc.
 - e. During or immediately after initial filling.

After Construction

14. For all NRCS hazard class (a) inventory size dams, and all NRCS hazard class (b) and (c) dams regardless of size (including DNRC “high” hazard dams):
- a. Complete NRCS-IWM-3 Form by February of calendar year following that of construction and submit to State Conservation Engineer.
 - b. Complete as-builts, collect all engineering and geology records related to planning, design and construction and send to State Conservation Engineer. Keep a copy of any records you wish for the area and field offices.

NI 290-300.04

GM 408.60(d)

MT528-2(5)