

INSTRUCTIONS FOR USE OF

NEBRASKA CONSTRUCTION SPECIFICATION

(NE-221) - BENTONITE TREATED EARTH FILL

1. APPLICABILITY

Construction Specification NE-221 is applicable to applying and mixing bentonite, and compacting bentonite-treated soils for use in irrigation storage, ponds, waste treatment lagoons, waste storage ponds, and other water storage practices as appropriate.

2. MATERIAL SPECIFICATION

There are no material specifications complementary to Construction Specification NE-221. Requirements for all materials to be used are included within the construction specification.

3. ITEMS TO BE INCLUDED IN SPECIFICATIONS AND/OR DRAWINGS

- A. Weight in pounds of bentonite per square foot of soil necessary to achieve desired sealing.
- B. Thickness and number of lifts necessary to achieve desired sealing.
- C. Class of compaction, Class A (end result) or Class C (method of compaction) shall be specified on the drawings. If NRCS has committed to provide construction inspection and has a quality assurance plan in effect then select Class A. Class C should only be used on agricultural waste facilities where post-construction testing of the liners is anticipated. If small farm ponds require sealing to prevent loss of water, Class C compaction is normally adequate without testing the seal.
- D. Slopes to be treated shall be 4:1 or flatter. This is considered the steepest slope that is workable with typical construction equipment.

If steeper slopes are desired, contact the field engineer for assistance in determining construction methods and costs related to such methods, i.e. stair step construction.