

**NATURAL RESOURCES CONSERVATION SERVICE  
PRACTICE DOCUMENTATION GUIDE IRRIGATION DITCH LINING      428**

**428 - STEP 1. INITIAL EVALUATIONS****PURPOSE**

The purpose of this step is to determine the landowner's desire to install irrigation ditch lining in a predetermined location for the intended purposes (See NRCS Conservation Practice Standard 428).

The landowner must be interviewed to determine the purpose and need install irrigation ditch lining. Considerations will include landowner goals and objectives, existing conditions, and effects of this practice on existing soil, water, air, plant, animal and human resources. A discussion of the NRCS installation of irrigation ditch lining standard, specification, and job sheet shall take place. Roles of the landowner and the person assisting with the planning and installation should also be discussed. Additional pertinent questions should be asked on a site-specific basis.

**428 - STEP 2. INVESTIGATIONS, SURVEYS, AND INVENTORIES****PURPOSE**

The purpose of this step is to identify the mandatory preliminary resource inventory and operations that are required before the irrigation ditch lining can be planned and installed. Resource inventories will include all data and information needed to make informed decisions in the planning and installation of irrigation ditch lining and any follow-up management needs. Appropriate resource inventories could include soils, topography, crops, irrigation water supply, water rights and all physical features such as existing ditches, fencing, roads, natural barriers, and the current or planned irrigation system, etc. that might have an effect on planning the usage of the irrigation ditch lining. Adjacent land uses and resources that would be affected by installation should also be considered. Identify map resources needed such as engineering surveys, USGS 7.5 minute quadrangle, soils, and road maps as well as aerial photography.

Also include identifying all needed utility clearances, archeological clearances (See NRCS Conservation Practice 428 job sheets, ENV-1 Environmental Assessment, and

Resource Inventory Checklist).

**428 - STEP 3. PRACTICE DESIGN****PURPOSE**

The purpose of this step is to develop a design for the application of irrigation ditch lining. This practice will be designed in accordance with all federal, state and local laws and ordinances and shall consist of an acceptable design and layout for the planned purpose and meet the intended life of the practice.

Resource inventories, local conditions, and the intended use will need to be assessed for the proposed irrigation ditch lining design and location.

A design will be developed with the client that meets the intended goals and objectives. All appropriate job sheets, maps and reports must be developed with landowners input, review and concurrence (See Conservation Practice 428 standard, specifications, and job sheets).

**II. SITING**

The purpose of this step is to insure that the irrigation ditch lining is properly located and that all involved fully understand where it is to be put into place.

**III. MATERIALS/EQUIPMENT**

The purpose of this item is to insure an understanding of the materials/equipment used to install the irrigation ditch lining. Appropriate specifications, job sheets and expectations that include the types and number of each type of material and equipment will be provided to the landowner and all those involved in the planning and installation of a irrigation ditch lining.

**428 -STEP 4. PLANS AND SPECIFICATIONS****PURPOSE**

The purpose of this step is to document and describe each component of the planned irrigation ditch lining, which includes step by step instructions to be used while installing the irrigation ditch lining. This will include the documentation of all components described in specifications and job sheet. Additional reference material should be included as needed and appropriate. The

landowner/operator must be provided with a complete detailed design and plan in the form of a Conservation Plan, Plan Map, and NRCS Job Sheet 428. These documents depict the design and location. Items not described in these listed documents, but essential for the location and installation of the irrigation ditch lining will be added to the specifications and drawings.

#### **428 - STEP 5. MANAGEMENT, OPERATION, AND MAINTENANCE**

##### **PURPOSE**

The purpose of this step is to assure that proper management, operation, and maintenance is completed on the irrigation ditch lining (See NRCS Practice Standard 428). This requires a familiarity with the design and correct installation of the irrigation ditch lining in a proper and safe fashion. Periodic operations and maintenance schedules should be installed. These measures should be discussed with and understood by the landowner.

#### **428 - STEP 6. COMPLIANCE OR SPOT CHECKING**

##### **PURPOSE**

The purpose of this step is to determine that all work has been completed in accordance with the standards required by the Natural Resources Conservation Service. All completed NRCS forms should be collected from the landowner and submitted to the appropriate persons (See NRCS Practice Standard, Specifications, and Job Sheets 428, NM-ENV-1 Environmental Assessment, and Resource Inventory Checklist).

#### **II. DOCUMENTS**

Copies of all completed job sheets, data sheets, and work sheets should be submitted to the Natural Resources Conservation Service representative within 10 working days of installation of the irrigation ditch lining. This includes the Practice Requirements as outlined in Job Sheet 428 and any other job sheets that may be needed for this practice to meet the intended goals and objectives.