

**NATURAL RESOURCES CONSERVATION SERVICE
DOCUMENTATION REQUIREMENTS**

**WASTE FACILITY CLOSURE
(No.)**

CODE 360

Reference Documents

The following is a list of reference materials useful in planning, design, and construction of a waste storage facility:

- Section IV Technical Guide, Louisiana NRCS Conservation Practice Standard (CPS) and General Specification (GS), code 360.
- NRCS – Agricultural Waste Management Field Handbook (NEH 210, Part 651)
- Midwest Plan Service (MWPS) #18

Site Investigation/Data Collection

- Use LA-ENG-360 and field notebooks for survey, layout, design and checking as applicable.
- The following is a list of items to be checked in the field:
 - Estimate the volume of waste remaining in the facility using the as-built data, where available.
 - Ensure a CNMP has been developed in order to apply the waste removed from the facility.
 - For preliminary volume estimates, use existing as-built data, if available.
 - Check for buried utilities, Louisiana ONE-CALL (LA-ENG-54).
 - Determine engineering job class.

Design Survey

- Survey notes shall be kept in loose-leaf or bound field notebooks. The notes will be kept in a format similar to that shown in Technical Release 62 and Chapter I, Engineering Field Manual. Electronic survey notes will be documented in a format that allows complete checking by others.
- The surveyor will use sound professional judgement in gathering information for the design and construction of the waste facility. Information will be used to determine structure(s) locations, grades and estimated quantities.
- If performing a GPS-RTK survey, at a minimum a static survey will be performed on at least one benchmark.
- Once waste has been removed, perform an adequate survey to determine the volume of the existing facility as follows:
 - Take a minimum of two cross sections (longitudinal and lateral) of the facility, including the embankment.
 - Take a centerline profile of the center of the embankment with survey points taken at a maximum of 25 ft spacing, at all changes in grade, and at all corners.
 - Record sufficient elevations to verify design top and bottom elevations, side-slopes, widths, and depths.
 - Record data on form LA-ENG-360.

Design Plans and Specifications

- The design of a waste facility will be in accordance with Louisiana Conservation Practice Standard 360, Waste Facility Closure.
- Determine facility size from the above described design survey, and record on LA-ENG-360.
- During this period the appropriate permit applications need to be completed by the cooperator.
- Other Federal, State, and Local laws - rules - regulations will apply depending on specific features (e.g. Cultural, Historical, Endangered Species, Wetlands).
- Compute quantities of excavation, fill, and appurtenances, as applicable.
- Use LA-ENG-360 to document final design, design reviews, and Engineering Job Approval Authorities.
- Electronic survey and computer design of features, computer output, and hand or CAD drawings will include adequate information for checking by others (design, quantities, etc.)

Construction Requirements

- Site specific construction details will be included on the Louisiana General Specification 360, and given to and signed by the cooperator.
- The cooperator, contractor, and the NRCS cooperator's file will be provided a set of construction plans and specifications.
- The plans will contain, as a minimum, the following:
 - Location map
 - Overall plan map
 - Cross section view of the facility showing dimensions, slopes, and elevations
 - Earthwork quantities
 - Engineering Job Approval Class and appropriate review signatures

Layout and Installation Procedures

- Layout surveys will be recorded in loose-leaf or bound survey books. Set grade stakes as needed. Survey notes will be kept in the format as shown in Chapter I - Engineering Field Manual and/or Technical Release 62. Electronic survey notes will be recorded in a format to allow upload to CAD software.

Checkout

- Take a minimum of two cross sections (longitudinal and lateral) of the finished grade with shots no greater than 25 feet apart.
- Record checkout survey and construction certification on LA-ENG-360.