



NRCS NY313 “Waste Storage Facility Standard”

By

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All New York State large and medium CAFOs that build new earthen manure storages are required to follow the NRCS NY313 Standard (see www.efotg.nrcs.usda.gov). (For existing un-designed storage structures, see “Is Your Manure Storage Up to Snuff?”.) The design must be prepared by or under the direction of a registered professional engineer or an NRCS employee with job approval authority. Equally important, a registered engineer is required to provide written certification that the storage was built following the prepared design. It is prudent for all farms to follow the standard to avoid potential future issues with un-designed storages on their farms.

NRCS NY313 Standard

The following bullets outline the major points found in the NRCS NY313 Standard.

- Waste storage facilities must be planned, designed and constructed to meet all federal, state and local laws and regulations. This is a catch all statement to ensure that laws or regulations such as those applicable from OSHA, Department of Labor, NY DEC (specifically sediment and erosion control), local zoning, “Dig Safely”, and FEMA flood plane zones are followed.
- The design storage period must be in concert with the farm’s CNMP.
- The storage design volume is based on; 1) the minimum number of months storage is required, 2) the amount of manure and other wastes added during the design storage period, 3) rainfall that lands directly on the storage surface, 4) runoff received by the storage, 5) accumulated solids that are not normally removed by the standard clean-out procedure, and 6) the storage must be designed to contain the 25-yr., 24-hr. storm event occurring anytime during the design storage period.
- Maximum storage level with 1’ freeboard must be permanently marked.
- Safety measures need to be followed. The storage must be fenced, following Standard NY382, if the walls are less than 5’ high.
- A geologic investigation is required and is best done as one of the first steps of the design process.

- A sediment and erosion control plan needs to in-place before construction starts.
- The bottom elevation of the storage must be at least 2' above the seasonal high water table and 1' above fractured bedrock unless a treatment is applied to seal the fractures.
- Storages located in highly permeable soils or limestone or fractured bedrock must have an impermeable liner that meets Standard 521.
- A site specific emergency action plan needs to be in-place in case of spills.
- A storage operation and maintenance plan is required by the CAFO permit.
- The methods to fill and empty the storage must follow Standard NY634.

NYS CAFO Permit requirements that may affect storages:

The following bullets outline requirements that may affect manure storage on CAFO farms.

- Duty to amend the CNMP PRIOR to any significant change including expansions (§VII.D. and §VIII.C.ii.).
- Proper operation and maintenance of BMP's and documentation of O&M practices (§VIII.C.).
- New or expanded wastewater retention facilities may not be located in 100-year flood plain unless protected from potential flooding.
- Duty to report spills to New York State DEC by telephone within 24 hours and additional report in writing within 5 days.

Specifically for large CAFO's:

- Inspect storages weekly. Document each inspection and any actions taken and retain records for five years.
- Records of storage design including volume of solids accumulation, approximate number of days of storage capacity, design treatment volume, total design volume, calculations used to determine total design volume for storages and records of any overflows including date, time, and estimated volume of spill.