



## Natural Resources Conservation Service

### STATEMENT OF WORK

#### WASTE STORAGE FACILITY (313)

These deliverables are the minimum requirements that apply to this individual practice. Refer to practice specific Statements of Work for associated conservation practices. Service providers (TSP or other) shall prepare and document deliverables for the Design, Installation, and Checkout sections and submit deliverables to the landowner with a copy for NRCS.

#### DESIGN

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##### Deliverables:

1. Design documentation that will demonstrate that the criteria in NRCS practice standard have been met and are compatible with other planned and applied practices.
  - a. Practice purpose(s) as identified in the conservation plan.
  - b. When applicable, design approval letter or Permit to Install (PTI) from the Ohio Department of Agriculture (ODA), Division of Livestock Environmental Permitting (DLEP)
  - c. List of required permits to be obtained by the client.
  - d. Compliance with NRCS national and state utility safety policy (NEM part 503-Safety, Sections 503.00 through 503.22); along with Ohio provisions stated in NEM Supplement OH503.40
  - e. Practice standard criteria related computations and analyses to develop plans and specifications including but not limited to:
    - i. Geology report (NEM Subpart 531a) conforming with
      1. Geology report criteria in NEM 531.4
      2. NEH Part 651 – AWMFH, Chapter 7 considerations
      3. Ohio NEM Supplement OH531.0 – Geology, Subpart A- Geologic Investigations
    - ii. Storage Volume and Maximum Operating Level.
    - iii. Structural, Mechanical and Appurtenances.
    - iv. Maximize Clean Water Diversion.
    - v. Environmental Considerations (e.g. liner failure, location, breaching, air quality).
2. Written plans and specifications including sketches and drawings shall be provided to the client that adequately describes the details and requirements for a competent construction contractor to install the practice, and for the client to obtain necessary permits. Drawings will conform to the Plans and Specification requirements stated in Ohio Conservation Practice Standard - Waste Storage Facility (313), and Ohio NEM Supplement OH541.0. Drawing details include, but are not limited to:
  - Details of permanent appurtenances needed to fill or empty the facility.
  - Erosion and sediment control measures.
  - Earth fill compaction requirements conforming to Ohio Earthfill Construction and Material Specification (OH-23).
  - Site preparation requirements (as necessary), i.e., topsoil scalping depth and stockpiling; waste material disposal; work limits.
  - Separation distance from the facility to the nearest well and neighboring residence
  - Fabricated Structures:
    - State applicable design loads (manure density, earth, vehicular, surcharge, wind & snow)
    - Listing of quality standards (such as lumber grade, and American Wood Protection Association (AWPA) use category; and applicable strength requirements (such as allowable shear & bending stress) for structural members
    - Details and quality standards for fasteners and connectors (including compatibility with wood preservatives)
    - When concrete is used, statement that concrete is required to meet NRCS-Ohio Construction Specification-Concrete

- References to components supplied by others and applicable certifications (such as precast concrete or engineered wood products).
- 3. Design Report and Quality Assurance Plan as appropriate (NEM Part 511, Subpart B Documentation, 511.11 and Part 512, Subpart D Quality Assurance Activities, 512.30 through 512.33); along with Ohio provisions stated in NEM Supplements OH511.5, OH511.8, and OH512.32 (including applicable associated checklists & QA spreadsheet)
- 4. When NRCS pre-approved Standard Detail Drawings Prepared by Non-NRCS Engineers are used for installation of this practice, certification that the drawings conform with Ohio NEM Supplement OH536.79 C
- 5. Operation and Maintenance Plan conforming to requirements stated in the Conservation Practice Standard
- 6. Certifications that the design meets practice standard criteria and comply with applicable laws and regulations; and, as applicable conforms with (NEM Part 505 - Non-NRCS Engineering Services, Subpart A) along with Ohio provisions stated in NEM Supplements OH505.1 and OH505.3.
- 7. Design modifications during installation as required.

## INSTALLATION

### Deliverables

1. Pre-construction conference with client, contractor, and NRCS representative.
2. Verification that client has obtained required permits.
3. Staking and layout according to plans and specifications including applicable layout notes.
4. Verification that delivered materials meet the design requirements and applicable certifications are on site prior to material installation
5. Installation quality assurance (according to Quality Assurance Plan as appropriate),
  - a. Actual materials used (NEM Part 512 - Construction, Subpart C – Evaluation of Construction Materials, 512.20 through 512.23; Subpart D - Quality Assurance Activities, 512.33).
  - b. ODA, DLEP permit requirements when applicable
  - c. Quality assurance records
  - d. Testing records
6. Facilitate and implement required design modifications with client and original designer.
7. Advise client/NRCS on compliance issues with all federal, state, tribal, and local laws, regulations and NRCS policies during installation.

## CHECK OUT

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### Deliverables

1. As-Built documentation.
  - a. Extent of practice units applied
  - b. "Red-line" drawings (NEM Part 512, Construction, Subpart F – As-builts, 512.50 through 512.52), along with Ohio NEM supplements OH512.51 B and OH512.52
  - c. When applicable ODA, DLEP construction approval letter or Permit to Operate (PTO) for the facility
  - d. Final quantities
2. Certification that the installation meets NRCS standards and specifications and is in compliance with permits; and when applicable, certification of conformance with (NEM Part 505 – Non-NRCS Engineering Services, Subpart A), along with Ohio provisions stated in NEM Supplements OH505.1 and OH505.3
3. When NRCS pre-approved Standard Detail Drawings Prepared by Non-NRCS Engineers are used for installation of this practice, certification that the completed practice conforms with Ohio NEM Supplement OH536.79 C
4. Progress reporting.

## REFERENCES

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- NRCS Agricultural Waste Management Field Handbook (AWMFH): <https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21430>
- Ohio NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard - Waste Storage Facility, 313: <https://efotg.sc.egov.usda.gov/#/>
- Ohio NRCS Field Office Technical Guide (eFOTG), Section IV, Construction Specifications, (Concrete & Earthfill): <https://efotg.sc.egov.usda.gov/#/>

- NRCS National Engineering Manual (NEM): <https://directives.sc.egov.usda.gov/> (Manuals, Title 210 – Engineering)
- Ohio NRCS supplements to the NEM: <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/oh/technical/engineering/?cid=stelprdb1247962>
- NRCS National Environmental Compliance Handbook: <https://directives.sc.egov.usda.gov/> (Handbooks, Title 190 – Ecological Sciences, Part 610)
- NRCS Cultural Resources Procedures Handbook: <https://directives.sc.egov.usda.gov/> (Handbooks, Title 190 – Ecological Sciences, Part 601)
- Ohio Department of Agriculture (ODA), Division of Livestock Environmental Permitting (DLEP): <https://www.agri.ohio.gov/wps/portal/gov/oda/divisions/livestock-environmental-permitting>

## STATE CONTACT

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