



*Helping People Help the Land*

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**TECHNICAL GUIDE  
NOTICE #212 (electronic)**

**Purpose:** To transmit information regarding the electronic NRCS Field Office Technical Guide (FOTG).

**Effective Date:** This notice is effective upon receipt.

**Notice of Changes:**

**SECTION IV: Practice Standards and Specifications**

**Conservation Practice Standards**

The following Standards and Statements of Work have been updated in the Conservation Practice Folder. Key revisions of the practice standards are given below.

**Agrichemical Handling Facility (309)**

- New national Agrichemical Handling Facility (ACHF) standard issued, therefore this replaces the interim NRCS-Michigan Agrichemical Containment Facility (702) standard.
- Revised Definition, Purpose, Conditions Where Practice Applies sections and following criteria to be consistent with new national standard:
  - Provide rinsate tanks of adequate number and size as needed for the type of operation, allowing for separation of non-compatible chemicals.
  - During the season when the agrichemical handling facility will be used, provide a means of storing or field applying spills according to the agrichemical label within 72 hours following the spill event.
  - For agrichemical handling facilities exposed to rainfall, if the pad is not power-washed after daily use during the growing season, provide a means of storing or field applying accumulated rainfall according to the agrichemical label within 72 hours following the rainfall event.
  - Added table listing minimum thickness for flexible membrane liners.

- More -

DIST: All Holders of the Field Office Technical Guide

- To ensure consistency with State of Michigan regulations:
  - Removed use of pipe outlet from sump for ACHFs with flexible membrane liners. Added criteria that outlet drains are not permitted under any circumstances.
  - Clarified that primary storage containers placed in an ACHF must be designed specifically for the liquid they are storing/containing and for above-ground operation.
- Clarified that the entire building is part of the Agrichemical Handling Facility. Therefore, the criteria that storage of equipment other than that directly related to the ACHF operation shall not be included in the ACHF applies to the entire building.
- Included the following criteria as variances to the new national practice standard:
  - Stationary agrichemical handling facilities (secondary containment and/or mix/load) are not to be located on sites where stationary pesticide storage, mixing, and loading has previously occurred over an extended period of time.
  - Follow State of Michigan regulatory requirements for capacity in secondary containment and operational areas.
  - Allow unreinforced concrete where a flexible membrane liner is used over the concrete.

#### **Land Reclamation, Abandoned Mine Land (543)**

#### **Land Reclamation, Currently Mined Land (544)**

- Changed titles to be consistent with updated national standard titles.
- Inserted standardized NRCS-Michigan text for Plans and Specifications and Operation and Maintenance sections.
- Added standardized NRCS-Michigan text for preference for use of native plant species.
- Revised Considerations to make them more like considerations rather than criteria.

#### **Pumping Plant (533)**

- Changed title to be consistent with updated national standard title.
- Added a Considerations section
- Replaced old Operation and Maintenance section with current standardized statement

#### **Watering Facility (614)**

- To be consistent with the updated national standard:
  - Included wildlife watering and accommodated watering facilities other than tanks/troughs.
  - Updated Definition, Purpose, Conditions Where Practice Applies, and Considerations sections.
  - Included criteria for incorporating escape features into the watering facility design where local knowledge and experience indicate that wildlife may be at risk of drowning.
  - Updated criteria for determining quantity of water to supply and location of watering facilities.
- Moved the surface water livestock watering access criteria from the NRCS-Michigan Stream Crossing standard to the updated Watering Facility standard.
- There are now two O&M Plans for Watering Facility in order to accommodate the significant difference between a trough/tank watering facility and a surface water livestock access watering facility.

**Stream Crossing (578)**

- Removed surface water livestock watering access criteria and moved it to the Watering Facility practice standard.
- Added criteria to require consultation with the U.S. Fish and Wildlife Service and the Michigan Department of Natural Resources for projects that may impact a threatened or endangered species require.
- Added criteria for maximum widths.
- Added criteria that the selected coarse aggregate or alternative surfacing measures shall accommodate access while discouraging the livestock from lingering in the stream crossing.
- Clarified criteria that the geotextile material shall be covered with at least 12 inches of coarse aggregate
- Changed criteria from woven to non-woven geotextile.

**Roof Runoff Structure (558)**

- Updated Definition, Purpose, and Conditions Where Practice Applies sections and title to be consistent with updated national practice standard.
- Updated 5-minute precipitation maps for Michigan.

**Spring Development (574)**

- Updated Definition and Purpose sections to be consistent with updated national practice standard.
- Added criteria to require consultation with the U.S. Fish and Wildlife Service and the Michigan Department of Natural Resources for projects that may impact a threatened or endangered species require.
- Added criteria for an investigation of site conditions.
- Added criteria to include measures in the collection system to prevent sediment from entering the system and/or provisions to trap and remove sediment that does enter the system.
- Added criteria that if the functional assessment indicates the ecological value of the spring is very high and there are no suitable measures to maintain the existing habitat, then alternatives to spring development shall be pursued.
- Included several new considerations for updated national practice standard.

NRCS-Michigan has 26 engineering practice standards that were reviewed but were not updated. NRCS policy requires that all standards be reviewed on a five-year cycle. For these 26 standards there are no updated national practice standards, and changes to the documents are minimal. The list of practices is provided below.

Animal Trails and Walkways (575)  
Channel Stabilization (584)  
Clearing and Snagging (326)  
Dike (356)  
Diversion (362)  
Dry Hydrant (432)  
Drainage Water Management (554)  
Grade Stabilization Structure (410)  
Grassed Waterway (412)  
Irrigation Regulating Reservoir (552)

Irrigation Storage Reservoir (436)  
Irrigation System, Surface and Subsurface (443)  
Irrigation Water Conveyance High-Pressure, Underground, Plastic Pipeline (430DD)  
Irrigation Water Conveyance Low-Pressure, Underground, Plastic Pipeline (430EE)  
Land Smoothing (466)  
Lined Waterway or Outlet (468)  
Obstruction Removal (500)  
Open Channel (582)  
Pipeline (516)  
Pond Sealing or Lining – Bentonite Treatment (521C)  
Pond Sealing or Lining – Soil Dispersant (521B)  
Surface Drainage, Field Ditch (607)  
Surface Drainage, Main or Lateral (608)  
Terrace (600)  
Underground Outlet (620)  
Water and Sediment Control Basin (WASCOB) (638)

### **Specifications**

The following Michigan Construction Specifications have been updated:

MI- 158 Reinforced Concrete  
MI- 159 Plain Concrete  
MI- 165 Geotextiles

### **Operation & Maintenance Plans**

The Operation & Maintenance Plans for all NRCS-Michigan engineering practices have been reviewed and updated, as appropriate, to address safety issues. A version date has also been added.

Technical questions pertaining to the above should be directed to Steve Davis, State Conservation Engineer, at (517) 324-5232.

Questions regarding FOTG content management should be directed to Ruth Shaffer, Water Quality Specialist, at (517) 324-5239.



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