NRCS
Natural Resources Conservation Service
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NATIONAL HANDBOOK OF CONSERVATION PRACTICES
450 – NHCP **September 1, 2015**
NOTICE 163

Purpose. This notice transmits new or revised national Conservation Practice Standards (CPSs), along with an updated index, for insertion into the National Handbook of Conservation Practices (NHCP). In addition, notes are included to highlight key changes made to each document.

Effective Date. This notice is effective upon receipt.

Explanation of Changes. New or revised national CPSs are as follows:

Animal Mortality Facility (Code 316) - Criteria for catastrophic animal mortality has been removed and place in new standard Emergency Animal Mortality Management (368). The information provided on composting has been expanded. Language was changed to improve the readability of the standard.

Channel Bed Stabilization (Code 584) - The proposed changes provide additional clarification regarding the conditions where the practice applies, general criteria, considerations, and technical references.

Contour Orchards and Other Perennial Crops (Code 331) - Removed wind erosion as one of the purposes and the technology addresses only sheet and rill erosion from water. Provided edits to the purposes to align with the NRCS list of natural resource concerns. Added the criteria for additional temporary erosion control measures on sites that are disturbed. Reduced the allowable contour row grade from 10% to 4%. Added criteria for inward sloping benches to improve sediment trapping on the slopes. Added minor edits throughout the standard to improve clarity.

Controlled Traffic Farming (Code 334) - This is a new conservation practice where heavy axle loads are confined to designated lanes or tramlines that will cover no more than 33% of the surface area of the field. The primary purpose is to reduce soil compaction.

Denitrifying Bioreactor (Code 605) - This proposed National Standard is based on the Interim Standards from Illinois and Iowa. These States have been using and refining this interim standard

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since 2009. As the Interim Standards are revised each year that new data are available, this summary of changes is brief.

Emergency Animal Mortality Management (Code 368) - This is a new conservation practice standard defined as a means or method for the management of animal carcasses from catastrophic mortality events.

Field Operations Emissions Reduction (Code 376) - This is a new conservation practice standard to address air particulate emissions (PM10 and smaller), especially in designated air quality impaired zones. The standard provides criteria to reduce emission of particulate matter from field operations primarily from tillage and harvest operations.

Forest Stand Improvement (Code 666) - The agency added new language to the definition: "…to achieve a desired future condition or obtain ecosystem services." Two purposes that refer to forest products are deleted because they do not refer to an environmental benefit. Purposes that refer to renewable energy systems and aesthetics and recreation are moved to "Considerations" because they are not primary purposes for this practice. NRCS changed "Conditions where Practice Applies" from "All Forest land", with exceptions for some agroforestry practices to "All land where the quantity and quality of trees can be enhanced." Under "General Criteria Applicable to All Purposes" NRCS changed the emphasis from silvicultural systems to achieving desired future conditions by altering the species composition or tree density. "Additional Criteria to Improve and Sustain Forest Health and Productivity" are added. Several new "Considerations" were added including descriptions of silvicultural and carbon sequestration options. Several new references were added.

Herbaceous Wind Barriers (Code 603) - The purpose and criteria to enhance snow deposition was removed because the vegetation during the winter period is not conducive to uniform snow deposition. Minor edits were made throughout the standard to improve clarity. Increased the criteria for barrier height for wind erosion period to 1.5 feet from 0.5 feet.

Irrigation System, Microirrigation (Code 441) - The purpose of reduced energy use has been removed. It would not be the primary purpose of planning a microirrigation system. There are some minor editing changes.

Karst Sinkhole Treatment (Code 527) - The proposed changes provide additional clarification regarding the conditions where the practice applies, general criteria, sinkhole treatment/closing and considerations.

Open Channel (Code 582) - The agency refined the definition, modified criteria, added considerations, updated requirements for plans and specifications, and updated requirements for operation and maintenance.

Pond (Code 378) - The agency refined the definition, modified criteria, updated considerations, updated requirements for plans and specifications, and updated requirements for operation and maintenance.

Roofs and Covers (Code 367) - The definition for the Roofs and Covers practice added agrichemical handling facilities to the waste management facilities specified. Criteria was added to include treated wood products and the type of associated fasteners and a table for geomembrane materials specified by cover purpose. Criteria was also added for appurtenant equipment associated with a cover over liquid manure storage facilities for the safe collection, conveyance, treatment or utilization of biogases.

Sprinkler System (Code 442) – Added "in absence of manufacturer's recommendations for pressure regulator operation, ensure line pressure upstream of regulators is at least 5 psi above rated regulator pressure". There are also some minor editing changes.

Surface Drain, Field Ditch (Code 607) – The agency changed the definition for clarity, along with a purpose and criteria added to allow use of this practice to collect irrigation tailwater for reuse.

Surface Drain, Main or Lateral (Code 608) – The agency removed the reference to the ambiguous phrase 'water management system' in the purpose to improve clarity. Criteria was added allowing the use of this practice as a component to collect irrigation tailwater, for use in a Tailwater Recovery System, (Code 447) along with a reference to the two-stage channel design process in NRCS National Engineering Handbook, Part 654.1005 in areas where increased channel stability is required.

Vegetated Treatment Area (Code 635) - This standard was edited to improve clarity. Additionally criteria was added to address pretreatment and erosion control measures and remove minimum flow length which affected design of small facilities.

Vegetative Barrier (Code 601) - The purpose and the criteria to use the vegetative barrier to control concentrated flow erosion was removed due to poor performance. Added minor edits throughout the standard to improve clarity.

Vertical Drain (Code 630) – The agency incorporated plain language into this practice standard by adding verbiage to address potential negative effects on underground habitat, in conditions

where practice applies. NRCS also added a statement in plans and specifications, focusing on documenting specific site characteristics, in relation to potential contamination sources. Finally, the agency added a references section with National Engineering Handbook 633, Chapter 26, gradation Design of Sand and Gravel Filters.

Filing Instructions. If a hardcopy of the NHCP is maintained, replace the "Contents" (pages i through vi, dated June 2015) with the revised pages found at http://directives.sc.egov.usda.gov/viewerFS.aspx?hid=22299

Remove and archive, as appropriate, the following existing practice standards:

Animal Mortality Facility (Code 316), dated September 2010
Channel Bed Stabilization (Code 584), dated, September 2010
Contour Orchards and Other Perennial Crops (Code 331), dated January 2010
Forest Stand Improvement (Code 666), dated May 2011
Herbaceous Wind Barriers (Code 603), dated January 2010
Irrigation System, Microirrigation (Code 441), dated May 2011
Karst Sinkhole Treatment (Code 527), dated September 2010
Open Channel (Code 582), dated October 1987
Pond (Code 378), dated May 2011
Roofs and Covers (Code 367), dated September 2010
Sprinkler System (Code 442), dated April 2013
Surface Drain, Field Ditch (Code 607), dated September 2011
Surface Drain, Main or Lateral (Code 608), dated September 2009
Vegetated Treatment Area (Code 635), dated May 2008
Vegetative Barrier (Code 601), dated January 2010
Vertical Drain (Code 630), dated September 2010

This notice, and each of the conservation practice standards included with this notice, can be accessed electronically through the NRCS Web site at http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/cp/ncps/?cid=nrcs143_026849

Federal Register Notice.

NRCS published two notices to solicit public comments about how to improve specific agency conservation practice standards in the *Federal Register* on May 5, 2015, and July 21, 2015, for a 30-day comment periods. Comments from the public were accepted during the comment period.

Guidance to the States and the Pacific Islands and Caribbean Areas for complying with the provisions of the 1996 Farm Bill that require advertising for public comment prior to revising NRCS State-level technical guides can be found in Title 450, General Manual, Part 401, Subpart B, Section 401.19.

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