



Natural Resources Conservation Service
P.O. Box 2890
Washington, D.C. 20013

NATIONAL HANDBOOK OF CONSERVATION PRACTICES

June 6, 2011

450 – VI

NOTICE 154

Amend. 12

Purpose. This notice transmits new or revised National Conservation Practice Standards, 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 Conservation Practice Standards, are as follows:

Alley Cropping (Code 311) – A new Purpose of “Develop Renewable Energy Systems” with accompanying additional Criteria was added.

Anionic Polyacrylamide (PAM) Application (Code 450) – A new Purpose of “Reduce Energy Use” with accompanying Criteria was added.

Conservation Crop Rotation (Code 328) – Two new Purposes of “Reduce Energy Use” and accompanying Criteria were added to (1) Supply plant produced nitrogen to reduce energy use and (2) Manage crop consumptive use of water to conserve water and reduce energy. Where the practice applies was clarified for time basis for annual produced crops. Additional Criteria were added to Improve Soil Quality. The crops grown shall produce a positive OM (Organic Matter) subfactor value over the life of the rotation, as determined by the Soil Conditioning Index procedure, with appropriate adjustments for additions to or subtractions from biomass on the field. This addresses the problem in low rainfall areas where producers could not plan a rotation with multiple other purposes and benefits because they are unable to achieve a positive OM subfactor.

Cover Crop (Code 340) – The purpose to produce supplemental forage was removed. A Purpose and accompanying Criteria were added to promote biological nitrogen fixation and “Reduce Energy Use” by using legume cover crops. Additional Operation and Maintenance criteria were added to evaluate the onsite application of the practice to ensure the planned purposes are achieved.

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Dam (Code 402) – A new Purpose of “Develop Renewable Energy Systems” with accompanying additional Criteria was added.

Dam, Diversion (Code 348) – A new Purpose of “Develop Renewable Energy Systems” with accompanying additional Criteria was added.

Farmstead Energy Improvement (Code 374) – The title was changed from “On-Farm Equipment Efficiency Improvements” to “Farmstead Energy Improvement.” The Definition was changed. A new Purpose of “Reduce Energy Use” with accompanying Criteria was added. Technologies with corresponding industry standards were added to the Criteria section.

Forest Stand Improvement (Code 666) – A new Purpose of “Develop Renewable Energy Systems” with accompanying additional Criteria was added.

Irrigation Ditch Lining (Code 428) – A new Purpose of “Reduce Energy Use” with accompanying Criteria was added.

Irrigation Pipeline (Code 430) – New Purposes of “Reduce Energy Use” and “Develop Renewable Energy Systems” along with accompanying Criteria and Reference were added.

Irrigation Reservoir (Code 436) – New Purposes of “Reduce Energy Use” and “Develop Renewable Energy Systems” along with accompanying Criteria and Reference were added.

Irrigation System, Microirrigation (Code 441) – The Unit was changed from (No. & Ac.) to (Ac.). A new Purpose of “Reduce Energy Use” and accompanying Criteria were added. The filter permissible design head loss was changed, and a requirement for an Irrigation Water Management Plan was added.

Irrigation System, Sprinkler (Code 442) – A new Purpose of “Reduce Energy Use” and accompanying Criteria and Reference were added.

Irrigation System, Surface and Subsurface (Code 443) – A new Purpose of “Reduce Energy Use” and accompanying Criteria was added.

Irrigation System, Tailwater Recovery (Code 447) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added.

Irrigation Water Management (Code 449) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria and Reference were added.

Mulching (Code 484) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added. Criteria were added to the Operation and Maintenance section of the standard to evaluate the effectiveness of the practice to achieve the planned purpose(s).

Pipeline (Code 516) – New Purposes of “Reduce Energy Use” and “Develop Renewable Energy Systems” along with accompanying Criteria and Reference were added.

Pond (Code 378) – A new Purpose of “Develop Renewable Energy Systems” and accompanying additional Criteria was added.

Pumping Plant (Code 533) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added. The Criteria Applicable to All Purposes was augmented for renewable power units, and Additional Criteria Applicable to the Improvement of Energy Efficiency was removed.

Residue and Tillage Management, Mulch Till (Code 345) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added. The revision combined Additional Criteria for wind and water erosion into one set of criteria. Criteria were added to the Operation and Maintenance section of the practice to evaluate on-site performance of the practice. This will help to determine if the purpose(s) are being achieved.

Residue and Tillage Management No Till/Strip Till/Direct Seed (Code 329) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added. Additional Criteria to Reduce Sheet/Rill Erosion; Reduce Wind Erosion; and Reduce Soil Particulate Emissions were combined into one set of criteria. The Operation and Maintenance had additions to evaluate the function of the practice onsite to ensure the purpose(s) is/are achieved.

Residue and Tillage Management, Ridge Till (Code 346) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added. Criteria were added to the Operation and Maintenance section of the standard to evaluate the effectiveness of the practice to achieve the planned Purpose(s).

Residue Management, Seasonal (Code 344) – A new Purpose of “Develop Renewable Energy Systems” and accompanying additional Criteria was added to provide crop residues for bioenergy feedstocks. Then additional criteria to harvest crop residues for bioenergy feedstocks for renewable energy production tied to erosion. Where Practice Applies section was revised to include all cropland where biomass is removed for bioenergy feedstocks. This allows the use of

this practice to remove crop residues from other residue management practices without adding specific criteria to each of those practices for biomass removal. Additional Operation and Maintenance criteria were added to evaluate the onsite application of the practice to ensure the planned purposes are achieved.

Silvopasture Establishment (Code 381) – A new Purpose of “Develop Renewable Energy Systems” and accompanying additional Criteria was added.

Tree/Shrub Establishment (Code 612) – A new Purpose of “Develop Renewable Energy Systems” and accompanying additional Criteria was added.

Waste Recycling (Code 633) – The title was changed from “Waste Utilization” to “Waste Recycling.” A new Purpose of “Reduce Energy Use” and accompanying Criteria was added. The application is more focused on processing and recycling agriculture waste material into a valuable by-product.

Windbreak/Shelterbelt – Establishment (Code 380) – A new Purpose of “Reduce Energy Use” and accompanying additional Criteria was added.

Woody Residue Treatment (formerly Forest Slash Treatment) (Code 384) – The title was changed from “Forest Slash Treatment” to “Woody Residue Treatment.” A new Purpose of “Develop Renewable Energy Systems” and accompanying additional Criteria was added.

Filing Instructions. If a hard copy of the NHCP is maintained, replace the “Contents” pages i through vi, dated September 2010, with the revised pages found at http://directives.sc.egov.usda.gov/H_450_NHCP_Index_154.rtf.

Insert the new or revised standards listed above in bold in the NHCP in alphabetical order, as designated on the revised “Contents” pages. Remove and archive, as appropriate, the following existing practice standards:

Alley Cropping (Code 311) dated January 2006
 Anionic Polyacrylamide (PAM) Application (Code 450) dated September 2009
 Conservation Crop Rotation (Code 328) dated April 2010
 Cover Crop (Code 340) dated September 2010
 Dam (Code 402) dated July 2002
 Dam, Diversion (Code 348) dated April 2002
 Forest Stand Improvement (Code 666) dated September 2010
 Irrigation Ditch Lining (Code 428) dated September 2009
 Irrigation Pipeline (Code 430) dated September 2009
 Irrigation Reservoir (Code 436) dated September 2009
 Irrigation System, Microirrigation (Code 441) dated August 2006
 Irrigation System, Sprinkler (Code 442) dated December 2003

Irrigation System, Surface and Subsurface (Code 443) dated September 2010
 Irrigation System, Tailwater Recovery (Code 447) dated June 2007
 Irrigation Water Management (Code 449) dated February 2005
 Mulching (Code 484) dated September 2008
 On-Farm Equipment Efficiency Improvements (Code 374) dated September 2010
 Pipeline (Code 516) dated August 2000
 Pond (Code 378) dated July 2002
 Pumping Plant (Code 533) dated January 2010
 Residue and Tillage Management, Mulch Till (Code 345) dated April 2010
 Residue and Tillage Management No Till/Strip Till/Direct Seed (Code 329) dated April 2010
 Residue and Tillage Management, Ridge Till (Code 346) dated April 2010
 Residue Management, Seasonal (Code 344) dated April 2010
 Silvopasture Establishment (Code 381) dated July 2010
 Tree/Shrub Establishment (Code 612) dated September 2010
 Waste Utilization (Code 633) dated October 2003
 Windbreak/Shelterbelt – Establishment (Code 380) dated July 2010
 Forest Slash Treatment (Code 384) dated September 2010

This notice, and each of the conservation practice standards included with this notice, can be accessed electronically through the NRCS website at <http://www.nrcs.usda.gov/technical/Standards/nhcp.html> or from the FTP server at <ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/standards/>.

Federal Register Notice.

NRCS published a notice to solicit public comments about how to improve specific agency conservation practice standards in the *Federal Register* on April 11, 2011, for a 30-day comment period. 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 the General Manual, Title 450, Part 401, Subpart B, Section 401.19.

/s/

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