

TO: State Technical Committee Members, Vermont USDA
ACTION REQUESTED BY: November 27th 2020

National Handbook of Conservation Practices (NHCP) Notices 170 & 171 were recently posted, announcing changes to several national conservation practice standards.

The notices can also be found here:

<https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=22299>.

National practice standards are available online here:

http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/technical/cp/ncps/?cid=nrcs143_026849.

ACTION: Comments on these practices can be sent to the following specific individuals via email by November 27, 2020 :

Please direct comments regarding this overall content to Joe D. Buford, VT-State Resource Conservationist (joe.buford@usda.gov)

**1. [Send comments on these practices to Kayla Nickles, Civil Engineer](#)
kayla.nickles@usda.gov**

Composting Facility (Code 317) – The format of the document was converted to the new template and some language was added on general benefits of composting within the Considerations and Operations and Maintenance sections. The compost facility standard language was changed to emphasize soil health. There was some clarification of the language of roof runoff collection and potential leachate from the compost. A technical requirement was added to the standard to limit stack height to address potential spontaneous combustion safety hazard.

Well Decommissioning (Code 351) – This standard has undergone minimal changes. Changes to the Criteria section include adding “Laws and Regulation,” “Roles and Responsibilities,” “Disinfection,” and “Sealing and Collapsible Formation.” Deleted “Casing Grouted in Place” criterion.

Groundwater Testing (Code 355) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes.

Grade Stabilization Structure (Code 410) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes.

Grassed Waterway (Code 412) – Minor revisions were made for clarity and readability purposes. Clarified the minimum design storm to use under the heading “Stability” in the Criteria section. Added clarification on the freeboard requirements in the Depth section of Criteria. Statements were added in the Considerations section on soil health management systems and organic agriculture to address comments received from the general Federal Register notice for review. Removed the requirement for a profile in the Plans and Specifications section to address a comment provided during the general Federal Register notice for review.

Irrigation Pipeline (Code 430) – Formatting and writing style were updated to meet current agency requirements. Supplementary ASTM references added. Maximum pressure relief valve activation pressure established to allow for congruency between industry standard practice, sound engineering practice, and NRCS Conservation Practice Standard. Requirement to install backflow prevention devices where chemicals are added in accordance with responsible governing body has been established.

Irrigation Reservoir (Code 436) – Formatting and writing style were updated to meet current agency requirements. Removed energy use bulleted items from the Purpose section. Moved items related to energy use from the Criteria section to the Considerations section. Also moved fencing and critical planting from the Considerations section to the Criteria section.

Irrigation System, Microirrigation (Code 441) – Wording changes were made for clarity and readability. Provisions made for deficit irrigation. Standardized wording for injection of chemicals.

Irrigation Water Management (Code 449) – Wording changes were made for clarity and readability. Remote telemetry data systems with cloud-based irrigation scheduling capabilities were added to the standard. Four supplementary publications were added to the References section corresponding to cutting-edge science-based technology. “Condition Where Practice Applies” section was simplified by removing policy statements. Criteria section was reordered to clarify criteria to use for timing of irrigation events and criteria to use for the volume of irrigation events.

Lined Waterway or Outlet (Code 468) – Added tractive stress as design method based on a literature review. Updated References section.

Obstruction Removal (Code 500) – Formatting and writing style were updated to meet current agency requirements. Changes to Purpose and Conditions where Practice Applies sections were made to help clarify standard usage. Changes were made to help simplify and clarify the Criteria and Consideration section within the standards.

Livestock Pipeline (Code 516) – Revised language as needed to improve readability and clarity of the standard. No major technical changes were made, except the secondary purpose of “Develop renewable energy systems” was removed.

Pumping Plant (Code 533) – Formatting and writing style were updated to meet current agency requirements. Moved a few sentences to more appropriate sections of the practice. Minor revisions were made for clarity and readability purposes. The “Improve Air Quality” purpose was removed as it is addressed in NRCS CPS Combustion System Improvement (Code 372). Also removed “Additional Criteria for Improvement of Air Quality.” This should make it clear that this standard is not for the purpose of replacing, repowering, or retrofitting a combustion engine.

Drainage Water Management (Code 554) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes.

Access Road (Code 560) – The standard was changed to better accommodate local conditions and drainage issues.

Heavy Use Area Protection (Code 561) – Simplified the definition to provide more flexibility to standard. Added reduce soil erosion as a purpose. Added the wording of relocation or treatment under the

Considerations section to allow more flexibility in addressing the heavy use area resource concern. Changed name of Additional Criteria sections to better fit purpose statement.

Stormwater Runoff Control (Code 570) – Changed the Definition to systems to control the quantity and quality of stormwater runoff. Reworded to remove flooding and clarify where the practice is used. Added emphasis for infiltration of precipitation for use in ground water recharge. Allowed other measures in addition to vegetative measures.

Spring Development (Code 574) – Formatting and writing style were updated to meet current agency requirements. Moved text in Criteria section to better align with the subsections. Updated Plans and Specifications and Operation and Maintenance sections with concise text. Changed the Definitions section to exclude Purpose section language.

Trails and Walkways (Code 575) – Improved wording for clarity and readability. Added criteria for drain spacing and trail widths. Clarified what is to be provided in the Specifications section and updated the References section.

Streambank and Shoreline Protection (Code 580) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes. References were also updated.

Surface Drain, Field Ditch (Code 607) – Formatting and writing style were updated to meet current agency requirements. Updated Criteria section to include responsibilities of the landowner and contractor to follow laws and regulations, obtain all necessary permits, and locate all utilities.

Watering Facility (Code 614) – Minor revisions were made for clarity and readability purposes. Clarification added that this practice does not apply to embankment or excavated ponds. Requirements were added for backflow prevention when connecting to domestic or municipal water supplies. Requirements were added for fencing where fencing is needed.

Underground Outlet (Code 620) – Minor rewording to improve readability. Clarified Criteria section on thrust blocking, bedding, and backfill requirements to evaluate for site-specific conditions. Revised Criteria section for maximum velocity in perforated drain tubing to 12 feet per second and maximum velocity in nonperforated pipe to follow manufacturer's recommendations. Under Outlet heading of the Criteria section, a table was added showing minimum lengths of outlet pipe required by pipe diameter. Considerations section was updated to add selecting vegetation species that are native, support pollinators, and wildlife as appropriate.

Waste Treatment (Code 629) – Purpose revised to improve water quality, improve air quality resource concerns, and facilitate waste handling and storage. Conditions where this practice applies is on all land uses where manure and/or agricultural waste is being generated and where soils, geology, and topography are suitable for construction of the waste treatment system. Criteria sections added to address system designs outside the scope of current accepted NRCS conservation practice standards, waste stream pretreatment requirements, byproducts handling and storage, and required technical review of treatment performance.

Water Well (Code 642) – This standard has undergone minimal changes. Changes in the Criteria section included adding a new “roles and responsibility,” “screen and filter pack installation,” and “well performance aquifer testing” criteria.

Energy Efficient Lighting System (Code 670) – This document has been revised extensively. The name has been changed from “Lighting System Improvement” to “Energy Efficient Lighting System” to better reflect the improved energy efficiency purpose. The standard has been rewritten to better focus on energy efficiency and energy conservation versus performance. The requirement for an American Society of Agricultural and Biological Engineers standard ASABE S612 Type 2 energy audit has been revised to allow other assessment methods. Criteria was added to support prescriptive upgrades to simplify and streamline implementation of some instances of the practice. Additions were made to the Criteria and Considerations sections for greenhouses and nurseries.

Energy Efficient Building Envelope (Code 672) – This document has been revised extensively. The name has been changed from “Building Envelope Improvement” to “Energy Efficient Building Envelope” to better reflect the improved energy efficiency purpose. The standard has been rewritten to better focus on energy efficiency criteria, fire safety, flexibility, and industry standards. The requirement for an ASABE S612 Type 2 energy audit has been revised to allow other assessment methods. Criteria was added to support prescriptive upgrades to simplify and streamline implementation of some instances of the practice. Additions were made to the Criteria and Considerations sections for greenhouses.

2. Send comments on these practices to Sandra Primard, VT State Agronomist (sandra.primard@usda.gov)

Forage Harvest Management (Code 511) – Most changes were minor in nature. Added content to reflect current agency policies and science. The definition was reworded for improved clarity. Two new purposes were added including “Optimizing soil microbial life and aggregate stability” and “Reduce soil compaction” to address soil health resource concerns. The remaining purposes were reworded slightly for improved clarity. New additional criteria for the two new purposes were added. Considerations section was reworded for improved clarity. Considerations section updated with valid new considerations. References were updated.

Pasture and Hay Planting (Code 512) – The name was changed from “Forage and Biomass Planting” to “Pasture and Hay Planting” to better convey NRCS’ intending purpose of the practice. Changes were made to reflect current agency policy and science. Air quality was added as a Purpose. “Produce feedstock for biofuel production” was removed as a purpose. The purpose “Improve soil and water quality” was split into two purposes, “Improve water quality” and “Improve Soil Health.” The General Criteria section was updated to reflect the use of ecological site descriptions and forage suitability groups. Additional Criteria section was added for the three purposes added. The Considerations section was revised and updated to better represent the applicability of the standard. Plans and Specifications and References sections were updated to support the content and changes made.

Row Arrangement (Code 557) – Minor editorial changes to Purposes and Condition Where Practice Applies sections to provide clarity. The order of topics in Criteria section was changed to provide a better flow of information. Editorial changes were made to Considerations section to provide context and clarity. Reference was added.

Amendments for Treatment of Agricultural Waste (Code 591) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes. The section on validation of the product better defines the criteria used by NRCS to determine what amendments are used under this standard. References were updated.

Pest Management Conservation System (Code 595) – This standard revised the Conditions Where Practice Applies section to improve clarity and removed the word “drift” from a bulleted list of predicted pesticide movement pathways based on soil properties in the Criteria section. Additionally, there was a clarification of an item in Plans and Specifications section. These revisions are considered “pen and ink” changes and do not impact the scheduled standard revision cycle. The date on this standard has been changed to October 2019R to indicate this is a pen and ink revision.

Saline and Sodic Soil Management (Code 610) – The name of the standard has changed slightly from “Salinity and Sodic Soil Management.” Minor revisions were made for clarity and readability purposes. The Criteria section was reordered to better match criteria to intended purposes.

[3. Send comments on these practices to Toby Alexander, VT State Forester/Biologist \(toby.alexander@usda.gov\)](mailto:toby.alexander@usda.gov)

Herbaceous Weed Treatment (Code 315) – One purpose statement was determined to be a duplicate and was deleted along with the additional criteria for that purpose. Terminology was changed to be consistent throughout the standard. An additional requirement was added to the Plans and Specifications section. A few wording changes were made for clarity and readability.

Prescribed Burning (Code 338) – This standard was last revised in 2010 and needed updating to reflect new policy and science. Definition was changed from controlled to planned to better reflect the practice. Added soil health to Purposes section. Criteria section changes included adding smoke management and reordered to reflect burn planning. Split Operations and 3 Maintenance section to reflect the difference between during the burn and post burn. Added and updated References section.

Riparian Forest Buffer (Code 391) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes. The Purposes section was updated to better correlate with resource concerns. Criteria section was adjusted to match changes in purposes. The References section was updated.

Tree/Shrub Site Preparation (Code 490) – Formatting and writing style were updated to meet current agency requirements. Minor revisions were made for clarity and readability purposes. Criteria section was updated to add for avoiding or mitigating soil damage and hydrologic impacts, and for evaluating pesticide risks. A new consideration was added, plans and Specifications section was expanded to align with conservation plan requirements, and Operations and Maintenance section was expanded to include safety plans for chemical exposure. The References section was also updated.