

MAR 10 2000

LCRC
FORM 2

Clearinghouse Rule No. 00-036

WISCONSIN LEGISLATIVE COUNCIL STAFF

RULES CLEARINGHOUSE

Ronald Sklansky
Director
(608) 266-1946



Laura D. Rose, Interim Director
Legislative Council Staff
(608) 266-1304

Richard Sweet
Assistant Director
(608) 266-2982

One E. Main St., Ste. 401
P.O. Box 2536
Madison, WI 53701-2536
FAX: (608) 266-3830

CLEARINGHOUSE REPORT TO AGENCY

[THIS REPORT HAS BEEN PREPARED PURSUANT TO S. 227.15, STATS. THIS IS A REPORT ON A RULE AS ORIGINALLY PROPOSED BY THE AGENCY; THE REPORT MAY NOT REFLECT THE FINAL CONTENT OF THE RULE IN FINAL DRAFT FORM AS IT WILL BE SUBMITTED TO THE LEGISLATURE. THIS REPORT CONSTITUTES A REVIEW OF, BUT NOT APPROVAL OR DISAPPROVAL OF, THE SUBSTANTIVE CONTENT AND TECHNICAL ACCURACY OF THE RULE.]

CLEARINGHOUSE RULE 00-036

AN ORDER to create chapter NR 154, relating to best management practices, conditions and technical standards.

Submitted by **DEPARTMENT OF NATURAL RESOURCES**

- 02-10-00 RECEIVED BY LEGISLATIVE COUNCIL.
- 03-09-00 REPORT SENT TO AGENCY.

RNS:JLK:jal;rv

MAR 1 9AM

LEGISLATIVE COUNCIL RULES CLEARINGHOUSE REPORT

This rule has been reviewed by the Rules Clearinghouse. Based on that review, comments are reported as noted below:

1. STATUTORY AUTHORITY [s. 227.15 (2) (a)]

Comment Attached YES NO

2. FORM, STYLE AND PLACEMENT IN ADMINISTRATIVE CODE [s. 227.15 (2) (c)]

Comment Attached YES NO

3. CONFLICT WITH OR DUPLICATION OF EXISTING RULES [s. 227.15 (2) (d)]

Comment Attached YES NO

4. ADEQUACY OF REFERENCES TO RELATED STATUTES, RULES AND FORMS [s. 227.15 (2) (e)]

Comment Attached YES NO

5. CLARITY, GRAMMAR, PUNCTUATION AND USE OF PLAIN LANGUAGE [s. 227.15 (2) (f)]

Comment Attached YES NO

6. POTENTIAL CONFLICTS WITH, AND COMPARABILITY TO, RELATED FEDERAL REGULATIONS [s. 227.15 (2) (g)]

Comment Attached YES NO

7. COMPLIANCE WITH PERMIT ACTION DEADLINE REQUIREMENTS [s. 227.15 (2) (h)]

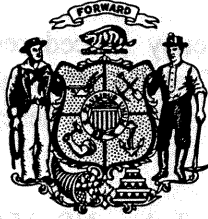
Comment Attached YES NO

WISCONSIN LEGISLATIVE COUNCIL STAFF

RULES CLEARINGHOUSE

Ronald Sklansky
Director
(608) 266-1946

Richard Sweet
Assistant Director
(608) 266-2982



Laura D. Rose,
Interim Director
Legislative Council Staff
(608) 266-1304

One E. Main St., Ste. 401
P.O. Box 2536
Madison, WI 53701-2536
FAX: (608) 266-3830

CLEARINGHOUSE RULE 00-036

Comments

[NOTE: All citations to "Manual" in the comments below are to the Administrative Rules Procedures Manual, prepared by the Revisor of Statutes Bureau and the Legislative Council Staff, dated September 1998.]

1. Statutory Authority

Section 281.65 (4) (e), Stats., provides that the rules must specify which best management practices are cost-effective best management practices. Section NR 154.02 (3) defines "cost effective." However, the defined term appears to be used in only three parts of ch. NR 154: (a) s. NR 154.03 (1) (e) requires practices below the ordinary high-water mark to be the "most" cost-effective means of preventing or reducing pollutants; (b) s. NR 154.03 (14) (b) 3. b. provides for cost-sharing of agricultural sediment basins of a certain height only if the Department of Natural Resources (DNR) makes a finding that the construction is cost effective; and (c) s. NR 154.03 (21) (b) 4. b. and 7. describes how to determine if the relocation or abandonment of an animal lot is cost effective.

Thus, the statutory requirement that the rules specify which best management practices are cost effective seems to have been complied with only with respect to animal lots. It appears that ch. NR 154 should establish a link between the requirement regarding cost effectiveness and the various provisions in ch. NR 154.

2. Form, Style and Placement in Administrative Code

a. As discussed in item 4. a., below, the statutory authority and statutes interpreted section of the analysis should refer to s. 281.65, Stats. Section 281.65 (4) (e), Stats., requires that the rules promulgated under s. 281.65 (4) be done in consultation with the Department of

Agriculture, Trade and Consumer Protection (DATCP) and also requires that, before the rules are promulgated, DNR must submit the rules to the Land and Water Conservation Board for review under s. 281.65 (3) (at), Stats.

Neither the analysis nor the agency procedures for promulgation description in the Report to the Legislative Council Rules Clearinghouse indicate that these steps have been or will be taken. These steps are required and should be described in the materials submitted to the Legislature.

b. There are two provisions labeled s. NR 154.02 (12). The second one should be renumbered as s. NR 154.02 (13).

c. Section NR 154.02 (1) and (12) define "agricultural performance standards" and "non-agricultural performance standards," respectively. However, neither term is used in ch. NR 154, other than in a reference in a note in s. NR 154.01. A term should not be defined unless it is used in the text of a chapter.

d. Definitions should be in alphabetical order. [See s. 1.01 (7) (a), Manual.] Thus, "cost sharing" should follow "cost-share agreement."

e. In s. NR 154.02 (14), "source" should not be capitalized. In s. NR 154.03 (12) (c) 8., "crevice" should not be capitalized. In s. NR 154.03 (18) (a), "technical" should not be capitalized. In s. NR 154.03 (22) (c) 1., "well" should not be capitalized. In s. NR 154.03 (23) (c) 1. c. and (24) (c) 1. c., "manure" should not be capitalized. In s. NR 154.03 (24) (a) "technical" should not be capitalized. [See s. 1.01 (4), Manual.]

f. There are two provisions labeled s. NR 154.02 (18). The second one should be renumbered s. NR 154.02 (19).

g. Section NR 154.03 (1) (b) 3. refers to technical standards in a particular DNR publication. It would be useful if a note were inserted following this provision to specify how this document may be obtained or viewed. [See s. 1.09 (1), Manual.] This comment also applies to s. NR 154.03 (9) (c) 2., (14) (c) (intro.) and (19) (c).

h. In s. NR 154.03 (2) (c), the entire title should be italicized. [See s. 1.05 (2) (d), Manual.] This comment also applies to s. NR 154.03 (5) (c), (6) (c), (11) (c) and (12) (c).

i. In s. NR 154.03 (3) (b) and (19) (c), the subdivision number "1." should be deleted because there are no other subdivisions. [See s. 1.03 (intro.), Manual.]

A similar comment applies to s. NR 154.03 (6) (b) in which the subdivision number "1." should be deleted and the subdivision paragraphs a. and b. should be changed to subdivision numbers 1. and 2.

j. Section NR 154.03 (8) (b) (intro.) provides that "cost-sharing may be provided for:". It should be changed to use an introductory phrase such as "cost-sharing may be provided for

[all] [any] of the following:”. [See s. 1.03 (8), Manual.] Similarly, s. NR 154.03 (9) (b) 1. (intro.) should use an introductory phrase which refers to the following items.

In general, ch. NR 154 uses a very inconsistent approach with respect to language which introduces a list and also with respect to end punctuation of items in the lists. Introductory language should be used to explicitly refer to the list that follows. For example, in s. NR 154.03 (10) (b) 1., the phrase “Cost-sharing may be provided for the planting of cover in green manure crops:” should be changed to a phrase such as “Cost-sharing may be provided for the planting of cover and green manure crops for all of the following purposes:”.

The correct punctuation at the end of items in a list is a period following each item, with the relationship of the items explained in the introductory clause. This makes it easier to delete or insert material in the future. For example, in s. NR 154.03 (10) (b) 1., the semicolons and the conjunction before the last item in the list should all be changed to periods. In s. NR 154.03 (23) (b) 5. a., b. and c., “; or” should be changed to a period in each provision.

In general, the entire rule should be reviewed to establish a consistent approach with respect to introductory language to lists and end punctuations for the items in a list.

k. In several places in the rule, the phrase “, but are not limited to” should be deleted after “include.” For example, see s. NR 154.03 (9) (b) 1. a.

l. Section NR 154.03 (9) (c) should be changed so that the first part includes introductory language such as: “The following technical standards apply under this subsection:”. The “NRCS field office technical standard 595” should be listed as s. NR 154.03 (9) (c) 1., and s. NR 154.03 (9) (c) 2. should begin on a separate line.

m. There are two provisions labeled s. NR 154.03 (11) (c) 1. h. The first one should begin on a new line, and the second one should be renumbered s. NR 154.03 (11) (c) 1. i., with an appropriate change made to the following item.

n. There are two provisions labeled s. NR 154.03 (16) (c) 4. The second one should be renumbered s. NR 154.03 (16) (c) 7.

o. In the last sentence of s. NR 154.03 (19) (b) 6. a. and 8. d. and f., “must” should be changed to “shall.” [See s. 1.01 (2), Manual.] The entire rule should be reviewed for instances of the word “must.” Also, it appears that in s. NR 154.03 (19) (b) 6. d., “should” should be changed to “shall.”

p. In s. NR 154.03 (19) (b) 6. d., the two references to “three layers” should be changed to “3 layers.” [See s. 1.01 (5), Manual.]

q. A title should be provided for s. NR 154.03 (23) (c) because titles are provided for the other paragraphs in s. NR 154.03 (23). [See s. 1.05 (1), Manual.]

4. Adequacy of References to Related Statutes, Rules and Forms

a. The title of ch. NR 154 indicates that it relates to best management practices, technical standards and cost-share conditions. Section 281.65 (4) (e), Stats., requires DNR to promulgate rules concerning best management practices which are required for eligibility for cost-sharing grants. Section 281.65 (4) (e), Stats., also requires that the standards and specifications concerning best management practices be consistent with the performance standards, prohibitions, conservation practices and technical standards under s. 281.16, Stats. Similarly, s. 281.16 (3) (e), Stats., indicates that DNR must promulgate rules to specify criteria for determining whether cost-sharing is available under s. 281.65, Stats. Therefore, the statutes interpreted reference in the analysis should include s. 281.65, Stats., and the statutory authority reference should include s. 281.65 (4) (e), Stats.

It is not clear that references to s. 281.16 (2) and (3), Stats., are appropriate. However, in a sense, those provisions also are being interpreted inasmuch as the standards and specifications under s. 281.65, Stats., must be consistent with the performance standards, prohibitions, conservation practices and technical standards under s. 281.16, Stats.

The interrelationship between ch. NR 154, other proposed rules and ss. 281.16 and 281.65, Stats., is unclear. Some of the confusion may be contributed to by the fact that s. 281.65 (4), Stats., requires rules establishing "standards and specifications" but does not require rules establishing "technical standards." In contrast, s. 281.16 (2) and (3), Stats., requires rules establishing "technical standards" to implement "performance standards." While the s. 281.65 "standards and specifications" must be consistent with the the performance standards, prohibitions, conservation practices and technical standards under s. 281.16, Stats., they are not necessarily identical. Thus, labeling certain provisions in ch. 154 as "technical standards" suggests that they are the "technical standards" referred to in s. 281.16, Stats., rather than the "standards" referred to in s. 281.65, Stats. The confusion is exacerbated by the fact that s. 281.16 (3) (c), Stats., requires that *DATCP, not DNR*, promulgate rules establishing "technical standards" which relate to nonpoint sources that are agricultural.

Would it be more accurate to change the references in ch. NR 154 to "standards," rather than "technical standards"? Also, it would be helpful if the analysis and s. NR 154.01 were expanded to more completely explain the relationship of ch. NR 154 to other provisions in the Wisconsin Administrative Code.

b. The fiscal estimate indicates that the conditions in ch. NR 154 apply to chs. NR 120, 151 and 243. In contrast, the analysis indicates that the conditions apply to grant recipients under chs. NR 120 and 153 and may also be applicable in certain circumstances in chs. 151 and 243. This inconsistency should be clarified.

c. In the analysis, the statutory authority provision should include a reference to s. 227.11 (2) (a), Stats., and the statutes interpreted provision should delete the reference to s. 227.11 (2), Stats.

d. The note following s. NR 154.01 indicates that ch. NR 154 "may also apply to other programs as set forth in their administrative rules." The note then refers to various chapters. It

would be more useful to specify to which other programs ch. NR 154 applies in an unequivocal statement, rather than using equivocal language (that is, "may also apply") and indicating that chapters are included, with the implication that this is not an exhaustive listing.

e. Section NR 154.02 (2) refers to "the performance standards . . . in this chapter." However, there do not appear to be performance standards in ch. NR 154. This provision should be changed to cross-reference the provisions which include the pertinent performance standards.

f. In s. NR 154.03 (7) (b) 5., the reference to "nutrient management and pesticide management under subs. (9) and (10)" should be changed to "nutrient management and pesticide management under subs. (8) and (9)."

g. It appears that s. NR 154.03 (7) (c) 1., 2. and 3. should be renumbered as s. NR 154.03 (7) (b) 6., 7. and 8., respectively. It also appears that what is now s. NR 154.03 (7) (c) 4. should be renumbered as s. NR 154.03 (7) (c). Also, the last provision should be structured to match provisions in other subsections which provide technical standards and should include a reference to items that follow.

h. Section NR 154.03 (17) (b) 6. indicates that: "An appropriate permit, if required, and approval shall be obtained." It is not clear what kind of approval is needed. It would be useful to include a cross-reference to the approval process. Also, the subdivision should be reworded in the active voice.

i. Section NR 154.03 (17) (c) refers to design and implementation being "in accordance with standards approved by the department." It is not clear how approval for these standards is sought or if there is another provision under which standards are approved. This provision should be clarified. If there is another provision under which standards are approved, a cross-reference to that provision would be useful.

j. The second sentence of s. NR 154.03 (20) (b) 2. b. refers to "This paragraph." It appears that the reference should be to "This subdivision paragraph."

k. Section NR 154.03 (20) (b) 2. b. refers to "s. NR 154.20." There is no such provision. The correct cross-reference should be inserted.

l. Section NR 154.03 (20) (c) 2. refers to "other standards as approved by the department." It is not clear how approval for such standards is sought or if there is another provision under which standards are approved. This provision should be clarified. If there is another provision under which standards are approved, a cross-reference to that provision would be useful.

m. In s. NR 154.03 (21) (b) 1. d., it appears that the reference to "subs. (17), (19) and (20)" should be changed to "sub. (20)."

n. Section NR 154.03 (23) (c) 2. and (24) (c) 2. refer to: "Other standards as specified by the department." It would be useful to include a cross-reference to the provision in which these standards are specified. Similarly, s. NR 154.03 (25) (b) 1. d. refers to other measures

approved by DNR, and s. NR 154.03 (25) (c) 2. requires that milking center waste control systems must be designed in accordance with standards approved by DNR. Again, appropriate cross-references would be useful.

o. In s. NR 154.03 (25) (c) 1., the second set of items numbered “a., b. and c.” should be renumbered “d., e. and f.”, respectively.

p. Section NR 154.03 (27) (a) refers to the technical standards in s. NR 154.03 (27) (c). However, there is no s. NR 154.03 (27) (c).

q. Section NR 154.03 (28) (c) 1. indicates that DNR must identify acceptable technical standards for each best management practice in an approved priority watershed plan, approved priority lake plan or project grant. Section NR 154.03 (28) (c) 1. does not specify that it is directly related to the subject of s. NR 154.03 (28), that is, structural urban best management practices enumerated in s. NR 154.03 (28) (a). This link should be established.

Also, s. NR 154.03 (28) refers to standards developed under the process in “ch. NR 151.15.” There is no s. NR 151.15 in the rules submitted to the Rules Clearinghouse. The correct cross-reference should be inserted. Also, note that “s.” should precede the cite to a section, not “ch.”

5. Clarity, Grammar, Punctuation and Use of Plain Language

a. In s. NR 154.02 (4), the defined term “cost sharing” is not hyphenated. However, throughout most of ch. NR 154, the term “cost-sharing” is hyphenated. See, for example, s. NR 154.03 (1) (d) and (2) (b). This inconsistency should be remedied. The comma following “practice” should be deleted. Also, the quotation mark preceding “conservation” should be deleted.

b. In s. NR 154.02 (6), the gray mark covering the last period should be deleted. Also, ““Dam”” should replace “A dam.”

c. A period should be inserted at the end of s. NR 154.02 (11). This comment also applies to s. NR 154.02 (17).

d. Section NR 154.02 (18) (the first sub. (18)) and the note following it should use the defined acronym “NRCS” rather than referring to the natural resources conservation service of the U.S. Department of Agriculture.

e. A period should be inserted after the end of the title to s. NR 154.03.

f. Section NR 154.03 (1) (a) indicates that the chapter applies to all cost-share agreements “signed after (effective date of legislation).” The correct date should be inserted if this is in fact tied to the effective date of legislation.

Also, since s. 281.65 (4) (e), Stats., provides that DNR may waive the standards and specifications in exceptional cases, it would be more accurate if this sentence indicated that unless a waiver is granted under the cross-referenced provisions which provide for a waiver, the chapter applies to all cost-share agreements signed after the inserted date.

- g. Section NR 154.03 (1) (b) (intro.) should end with a colon, rather than a period.
- h. Section NR 154.03 (1) (b) 1. and 2. and other provisions refer to *installing* the best management practice. Section NR 154.03 (1) (b) (intro.) refers to *implementing* a best management practice. Section NR 154.03 (1) (b) 3. refers to the *construction* of the best management practice. Unless installing, implementing and construction are intended to have different meanings, it would be preferable to select one term and use it consistently.
- i. Section NR 154.03 (1) (b) 4. provides that in meeting the best management practices under ch. NR 154, "permanent and temporary vegetative cover including seed, mulch, fertilizer, trees, shrubs and other necessary materials, except for conventional agricultural crop cover, shall be established." This literally requires that all of the specified items be included. Unless all situations would always require that all of the specified items be included, it would appear to be more appropriate to rephrase this so that the specific items are examples, rather than requirements in each case.
- j. In s. NR 154.03 (1) (e), it is not clear how it is determined whether a practice is "the *most* cost-effective means" (emphasis added), rather than simply a "cost-effective means."
- k. In s. NR 154.03 (2) (c) (intro.), the phrase "are as:" should be changed to "are as follows:". (Also see item 2. j., above, relating to appropriate introductory language.)
- l. In s. NR 154.03 (2) (c) 1. to 4., three of the items are followed by a period. In contrast, the next-to-last item ends with the word "and." Section NR 154.03 (2) (c) 3. should be changed to end in a period.
- m. In s. NR 154.03 (2) (c) 2., a semicolon should be inserted after the word "removal."
- n. In s. NR 154.03 (4) (c) 10., the phrase "TO BE ADDED" should be changed to a date. This comment also applies to s. NR 154.03 (13) (c) 13. and 14., (23) (c) 1. e., (24) (c) 1. e. and (25) (c) 1. c. (the first c.).
- o. Section NR 154.03 (7) (b) 3. provides that cost sharing may be provided for a maximum of three years, with a possible one-year extension with DNR approval under ch. NR 154. Chapter NR 154 does not make clear how to apply for an extension or what standards DNR uses to evaluate an application for an extension.

A similar comment applies to s. NR 154.03 (10) (b) 3., which provides that cost-sharing may not be provided for certain practices for the same acreage in the same crop year without prior DNR approval. Again, it is not clear how to request an exception or what standards DNR uses to evaluate whether an exception should be made.

p. Section NR 154.03 (6) (c) 6. should begin on a new line, and the word "management" should be followed by a semicolon.

q. Section NR 154.03 (8) (a) refers to "one or more of the technical standards in par. (c)." However, there is only one standard in par. (c). Section NR 154.03 (8) (a) should be changed to reflect this. A similar comment applies to s. NR 154.03 (10) (a) and (18) (a), with respect to s. NR 154.03 (10) (c) and (18) (c), respectively.

r. Section NR 154.03 (8) (c) should be changed--either by making it a complete sentence or by changing the first semicolon to a colon.

s. The last sentence of s. NR 154.03 (11) (b) 1. leads into a list of items for which cost sharing may be provided. However, the listed items are also numbered as subdivisions of s. NR 154.03 (11) (b), rather than items which are subparts of subd. 1. This inconsistent approach should be remedied. Specifically, it appears that the last sentence of s. NR 154.03 (11) (b) 1. should be changed to s. NR 154.03 (11) (b) 2. (intro.) and that s. NR 154.03 (11) (b) 2. to 8. should be changed to s. NR 154.03 (11) (b) 2. a. to f. (If this approach is used, the reference in current s. NR 154.03 (11) (b) 7. to "this subparagraph" should be reviewed for accuracy after any changes are completed.)

t. In s. NR 154.03 (11) (c) 1. i., the period following "walkways" should be changed to a semicolon.

u. Section NR 154.03 (15) (b) 2. a. refers to "planting trees if approved by department fish manager." Does this position have a more specific title?

v. Section NR 154.03 (15) (c) 2. a. should end with a period.

w. The second period following the title of s. NR 154.03 (16) (a) should be deleted.

x. Section NR 154.03 (16) (b) 1. and 2. should end with a period.

y. The third sentence of s. NR 154.03 (19) (a) 2. refers to "grasses that have been maintained for several." It is not clear what several is being referred to; for example, is it several years or months?

z. Section NR 154.03 (19) (b) 3. should end with a period.

aa. Section NR 154.03 (19) (b) 6. a. and b. and 8. a. refer to the "no-touch zone." If this term is not commonly understood, it should be defined.

ab. The rule sometimes refers to "riprap" and other times refers to "rip rap." One term should be chosen and used consistently.

ac. Section NR 154.03 (19) (b) 5. a. requires that no "known" violations of shoreland zoning requirements be present on the entire property. It is not clear why the word "known" is included, that is, it is not clear who is responsible for knowing.

ad. The first sentence of s. NR 154.03 (19) (b) 5. b. should end with a period. Also, the comma after "gullies" should immediately follow the word.

ae. Section NR 154.03 (19) (b) 6. (intro.) should end with a colon.

af. The overstriking before the last sentence of s. NR 154.03 (20) (a) should be deleted.

ag. Section NR 154.03 (20) (b) 1. b. provides that no cost sharing is available if the discharge could be prevented through improved management practices at "nominal costs." It is not clear what "nominal costs" means or who determines if costs are nominal.

ah. A conjunction should be inserted before the last item in the series in s. NR 154.03 (20) (b) 1. c.

ai. In s. NR 154.03 (20) (c) 1. k., the overstricken "and" should be deleted.

aj. In s. NR 154.03 (20) (c) 1. l., the single apostrophe following 1999 should be deleted.

ak. In s. NR 154.03 (21) (b) 4. (intro.), should the reference to approval by the "governmental unit" be changed to approval by the "project sponsor"? If not, it is not clear which governmental unit is intended. This comment also applies to s. NR 154.03 (21) (b) 6. and (28) (c) 3. and 4.

al. In s. NR 154.03 (23) (b) 3. c., "s." should be changed to "ss."

am. In s. NR 154.03 (23) (c) 1. c. and (24) (c) 1. c., the comma at the end should be deleted.

an. Section NR 154.03 (25) (a) indicates that milking center waste control systems practice must be implemented using *one* or more of the technical standards in s. NR 154.03 (25) (c), thus suggesting a choice. However, s. NR 154.03 (25) (c) 2. indicates that it always applies. This inconsistency should be remedied.

ao. In s. NR 154.03 (25) (c) 1. b. (the first b.), a semicolon should be inserted before the date to be consistent with the format that is being used in the rule for listing technical standards.

ap. In s. NR 154.03 (25) (c) 1. a. (the second a.), the period following "tank" should be deleted.

aq. Section NR 154.03 (26) (a) indicates that the practice must be implemented using *one* or more of the technical standards in s. NR 154.03 (26) (c). However, s. NR 154.03 (26) (c) appears to indicate that all of the standards must be met. This inconsistency should be remedied.

ar. In s. NR 154.03 (26) (b) 2. a., "an" should be changed to "a." Also, the overstriking of "a" at the end of the first line should be removed. Also, it appears that the phrase "the sum of the walls" should be changed to "the sum of the length of the walls."

as. In s. NR 154.03 (26) (b) 2. b., it appears that the phrase "application requesting the enclosure" should be changed to "application requesting cost sharing for the enclosure."

at. In s. NR 154.03 (28) (c) 4., "criterion" should replace "criteria."

1 **ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD**
2 **CREATING RULES**

3
4 The Wisconsin Natural Resources Board proposes an order to create NR 154 relating to best
5 management practices, conditions and technical standards.

6
7 WT-11-00

8
9 Analysis Prepared by Department of Natural Resources

10
11 Statutory authority: ss. 281.16(2) and (3), Stats.

12
13 Statutes interpreted: ss. 281.16(2) and (3) and 227.11(2), Stats.

14
15 Ch. NR 154, Best Management Practices, Technical Standards and Cost-share Conditions, is a
16 new rule in response to two legislative acts, 1997 Wisconsin Act 27 and 1999 Wisconsin Act 9.
17 These acts require significant changes to the department's Nonpoint Source Water Pollution
18 Abatement Program and to the department of agriculture, trade and consumer protection's Soil
19 and Water Resources Management Program. Creation of ch. NR 154 is an integral part of
20 promulgating a series of inter-related administrative rules to implement a re-design of
21 Wisconsin's nonpoint source programs and related water regulations as set forth in these
22 legislative acts. Other related components of this effort that are being conducted concurrently
23 include: repeal and recreation of ch. NR 120, Nonpoint Source Pollution Abatement Program;
24 creation of ch. NR 152, Model Ordinances for Construction Site Erosion Control and Storm
25 Water Management; creation of ch. NR 153, Runoff Management Grant Program; creation of ch.
26 NR 151 Runoff Management; amendment of ch. NR 216, Storm Water Discharge Permits;
27 repeal and recreation of ch. NR 243, Animal Waste Management. The department of agriculture,
28 trade and consumer protection is concurrently revising ch. ATCP 50, Soil and Water Resource
29 Management, to incorporate changes in its programs required under 1997 Wisconsin Act 27 and
30 1999 Wisconsin Act 9.

31
32 Chapter NR 154, Best Management Practices, Technical Standards and Cost-share Conditions, is
33 a new rule that sets forth best management practices, technical standards and conditions that
34 apply to grant recipients under chs. NR 120 and NR 153. The department may require that the
35 best management practices, conditions and technical standards contained in this chapter be used,
36 regardless of cost-sharing. In such cases, the requirement is specified in the applicable code,
37 such as ch. NR 151 and ch. NR 243.

1 SECTION 1: Chapter NR 154 is created to read:

2
3 **Chapter NR 154**
4

5 **BEST MANAGEMENT PRACTICES, TECHNICAL STANDARDS AND COST-SHARE**
6 **CONDITIONS**
7

8 **NR 154.01 Purpose and applicability**

9 **NR 154.02 Definitions.**

10 **NR 154.03 Best management practices, conditions and technical standards**
11

12 **NR 154.01 Purpose and applicability.** The purpose of this chapter is to establish
13 conditions, eligibility requirements and technical standards for agricultural and non-agricultural
14 best management practices. The provisions of this chapter apply to best management practices
15 included in cost-share agreements developed under chs. NR 120 and 153 or otherwise provided
16 for in ss. NR 120.12(4), NR 120.29, NR 153.004 or NR 153.015.

17 **Note:** Provisions of this chapter may also apply to other programs as set forth in their
18 administrative rules. This includes projects resulting from issuance of a notice of discharge
19 under ch. NR 243, compliance with non-agricultural performance standards under ss. NR 151.12
20 and NR 151.13 and compliance with agricultural performance standards under s. NR 151.05,
21 manure storage facilities and s. NR 151.07, nutrient management.
22

23 **NR 154.02 Definitions.**

24 (1) "Agricultural performance standards" means runoff pollution performance standards
25 and prohibitions for agricultural facilities and practices for the purpose of striving to achieve
26 water quality standards as required by s. 281.15, Stats.

27 (2) "Best management practice" or "conservation practice" means a practice, technique or
28 measure which is determined to be an effective means of preventing or reducing runoff

1 pollutants to waters of the state, to a level compatible with the performance standards and
2 prohibitions in this chapter.

3 (3) "Cost effective" means that the following have been considered in selecting a
4 management practice: the predicted water quality and conservation benefits of the practice, the
5 minimum practice needed to achieve the water quality and conservation objectives, the cost of
6 the practice compared to feasible and effective alternatives and the practical effects of the
7 practice on the operation or the facility.

8 (4) "Cost sharing" means the action of financing a best management practice, or
9 conservation practice by means of a cost-share agreement.

10 (5) "Cost-share agreement" means the agreement established between the governmental
11 unit and the cost-share recipient which identifies the best management practices to be used on the
12 cost-share recipient's lands and the cost estimate, installation schedule and operation and
13 maintenance requirements for these best management practices.

14 (6) "Dam" means any artificial barrier in or across a waterway, which has the primary
15 purpose of impounding or diverting water. A dam includes all appurtenant works, such as a dike,
16 canal or powerhouse.

17 (7) "Department" means the Wisconsin department of natural resources.

18 (8) "Governmental unit" means any unit of government including, but not limited to, a
19 county, city, village, town, metropolitan sewerage district created under ss. 66.20 to 66.26 or
20 66.88 to 66.918, Stats., town sanitary district, public inland lake protection and rehabilitation
21 district, regional planning commission or drainage district operating under ch. 89, 1961 Stats., or
22 ch. 88, Stats. Governmental unit does not include the state or any state agency.

23 (9) "Land owner or land operator" means any individual, partnership, corporation,
24 municipality or person holding title to, having possession of or holding a lease in land.

25 (10) "Maximum storage capacity" means the volume of water in acre-feet capable of
26 being stored behind a dam at maximum water elevation before overtopping any part that is not
27 part of the spillway system.

1 (11) "Milking center wastes" means all wastewater, cleaning ingredients, waste milk or
2 other discharges from a milkhouse or milking parlor

3 (12) "NRCS" means the natural resources conservation service of the U.S. department of
4 agriculture.

5 (12) "Non-agricultural performance standards" means runoff pollution performance
6 standards for non-agricultural facilities and practices for the purpose of striving to achieve water
7 quality standards as required by s. 281.15, Stats.

8 (14) "Nonpoint Source" means a land management activity which contributes to runoff,
9 seepage or percolation which adversely affects or threatens the quality of waters of this state and
10 which is not a point source under s. 283.01 (12), Stats.

11 (15) "Priority watershed plan" means the detailed portion of the integrated resource
12 management plan prepared for priority watersheds as described in s. NR 120.08.

13 (16) "Project sponsor" means a governmental unit that oversees or otherwise administers
14 a priority watershed plan, a priority lake plan, a notice of discharge or a project grant application.

15 (17) "Structural height" means the difference in elevation in feet between the point of
16 lowest elevation of a dam before over-topping and the lowest elevation of the natural stream or
17 lake bed at the downstream toe of the dam

18 (18) "Technical guide" means the natural resources conservation service field office
19 technical guide, published by the natural resources conservation service of the U.S. department
20 of agriculture.

21 **Note:** Copies of the technical guide are on file with the department, the secretary of state,
22 and the revisor of statutes. Copies of individual standards contained in the technical guide may
23 be obtained from the county land conservation committee or from a field office of the U.S.
24 department of agriculture, natural resources conservation service.

25 (18) "Wetland or wetlands" has the meaning specified under s. 23.32, Stats.

26
27
28

1 **NR 154.03 Best management practices, conditions and technical standards**

2 **(1) GENERAL APPLICABILITY.** (a) The cost-share agreement conditions described in
3 this section apply to best management practices included in cost-share agreements or otherwise
4 provided for in ss. NR 120.12(4), NR 120.29, NR 153.004 and NR 153.015. The cost-share
5 conditions and technical standards for all best management practices listed in this chapter shall
6 apply to all cost-share agreements signed after (effective date of legislation). *revised*

7 (b) The following conditions shall be met while implementing the best management
8 practices in this chapter.

9 1. Wildlife habitat shall be recreated to replace significant wildlife habitat lost through
10 the removal of obstructions or other means required to install the best management practice.

11 2. Wetlands may not be destroyed or degraded as a result of installing the best
12 management practice.

13 3. Sediment generated from the construction of the best management practice shall be
14 controlled consistent with performance standards in ch. NR 151 and with technical standards of
15 the *Wisconsin Construction Site Best Management Practice Handbook*, WDNR Pub. WR-222,
16 November 1993 Revision. *↑ avail. ?*

17 4. Permanent and temporary vegetative cover including seed, mulch, fertilizer, trees,
18 shrubs and other necessary materials, except for conventional agricultural crop cover, shall be
19 established.

20 5. Preparation, grading, shaping, and removal of obstructions necessary to permit the
21 installation of best management practices shall be conducted on the site.

22 6. Temporary or permanent fencing and the repair of fencing necessary to implement or
23 protect a best management practice shall be built.

24 7. All required permits, including those mandated by the department, shall be obtained
25 prior to installing a best management practice listed in this chapter.

26 (c) A landowner, land operator or governmental unit shall comply with the technical
27 standards provided for in each of the following subsections when installing a best management
28 practice identified in that subsection.

1 (d) Cost-sharing is authorized when the best management practices are installed on sites
2 in a manner consistent with par. (b) and the watershed plan approved under ch. NR 120 or the
3 project application selected for funding under ch. NR 153.

4 (e) Best management practices listed in this chapter and which are conducted below the
5 ordinary high water mark may be eligible for cost-sharing only when the practice is the most
6 cost-effective means of preventing or reducing pollutants generated from sources of runoff or
7 from sediments of inland lakes polluted by runoff.

8 **(2) CONTOUR FARMING.** (a) *Description.* Contour farming is farming on sloped land
9 so all cultural operations from seedbed preparation to harvest are done on the contour. This
10 practice shall be implemented using one or more of the technical standards in par. (c).

11 (b) *Conditions.* Cost-sharing may be provided for the establishment of a contour farming
12 system and, if necessary, subsurface drains and the removal of obstructions.

13 (c) *Technical standards.* Technical standards from the NRCS field office technical guide
14 are as:

- 15 1. 330 - contour farming; May, 1986.
- 16 2. 500 - obstruction removal January, 1983.
- 17 3. 606 - subsurface drain; September, 1989 and
- 18 4. 645 - wildlife upland habitat management; June, 1987.

19 **(3) CONTOUR AND FIELD STRIPCROPPING.** (a) *Description.* Contour and field
20 stripcropping is growing crops in a systematic arrangement of strips or bands, usually on the
21 contour, in alternated strips of close growing crops, such as grasses or legumes, and tilled row
22 crops. This practice shall be implemented using one or more of the technical standards in par.
23 (c).

24 (b) *Conditions.* 1. Cost-sharing may be provided for the establishment of the
25 stripcropping system including field stripcropping and, if necessary, removal of obstructions and
26 installation of subsurface drains.

27 (c) *Technical standards.* Technical standards from the NRCS field office technical guide
28 are as follows:

- 1 1. 585 – contour stripcropping; July, 1987 ,
- 2 2. 586 - field stripcropping; August, 1983 .
- 3 3. 500 - obstruction removal; January, 1983
- 4 4. 606 - subsurface drain; September, 1989
- 5 5. 645 - wildlife upland habitat management; June, 1987
- 6 6. 330 - contour farming; May, 1986, and
- 7 7. 589 - wind strip-cropping; July, 1987.

8 (4) FIELD DIVERSIONS. (a) *Description*. Field diversions are structures installed to
9 divert excess water to areas where it can be used, transported or discharged without causing
10 excessive erosion or contacting materials with water pollution potential. Usually the system is a
11 channel with a supporting ridge on the lower side constructed across the slope at a suitable grade
12 with a self-discharging and non-erosive gradient. This practice shall be implemented using one
13 or more of the technical standards in par. (c).

14 (b) *Conditions*. 1. Cost-sharing may be provided for: ^{all ...}

15 a. Diversions and subsurface drains necessary for proper functioning of the diversion.
16 Cost-sharing for subsurface drains is limited to areas on sloping land where the internal water
17 seeps to the surface and causes the land or cover to lose its stability.

18 b. Installations of structures such as pipe, underground outlets, or other outlets, if needed,
19 for proper functioning of the dike, for more even flow, or to protect outlets from erosion.

20 2. Diversions shall discharge to a suitable outlet.

21 3. Cost-sharing may not be authorized for ditches or dikes designed to impound water for
22 later use, or which will be a part of a regular irrigation system.

23 (c) *Technical standards*. Technical standards from the NRCS field office technical guide
24 are as follows:

- 25 1. 362 - diversion; September, 1989
- 26 2. 342 - critical area planting; November, 1999
- 27 3. 382 - fence; November, 1999
- 28 4. 412 - grassed waterway or outlet; June, 1993

- 1 5. 468 - lined waterway or outlet; June, 1993
- 2 6. 500 - obstruction removal; January, 1983
- 3 7. 606 - subsurface drains; September, 1989
- 4 8. 620 - underground outlet; June, 1993
- 5 9. 645 - wildlife upland habitat management; June, 1987, and
- 6 10. 356 - dikes **TO BE ADDED.**

7 **(5) TERRACES.** (a) *Description.* Terraces are a system of ridges and channels
8 constructed on the contour with a non-erosive grade at a suitable spacing. This practice shall be
9 implemented using one or more of the technical standards in par. (c).

10 (b) *Conditions.* 1. Cost-sharing may be provided for:

11 a. Terraces and the necessary grading to permit installation of an effective system
12 consistent with the type of terrace and criteria for use specified in the approved priority
13 watershed plan, priority lake plan or project grant application.

14 b. Materials and installation of underground pipe outlets and other mechanical outlets
15 necessary for the proper functioning of the terrace.

16 2. Terraces shall discharge to a suitable outlet.

17 (c) *Technical standards.* Technical standards from the NRCS field office technical guide
18 are as follows:

- 19 1. 600 - terrace; September, 1990
- 20 2. 342 - critical area planting; November, 1999
- 21 3. 412 - grassed waterway or outlet; June, 1993
- 22 4. 468 - lined waterway or outlet; June, 1993
- 23 5. 500 - obstruction removal; January, 1983
- 24 6. 606 - subsurface drain; September, 1989
- 25 7. 620 - underground outlet; June, 1993
- 26 8. 638 - water and sediment control basin; September, 1989 and
- 27 9. 645 - wildlife upland habitat management; June, 1987.

1 (6) GRASSED WATERWAYS. (a) *Description*. A grassed waterway is a natural or
2 constructed drainageway or channel which is shaped, graded and established in suitable cover as
3 needed to prevent erosion by runoff waters. This practice shall be implemented using one or
4 more of the technical standards in par. (c).

5 (b) *Conditions*. 1. Cost-sharing may be provided for the following:

6 a. Site preparation, grading, shaping, filling, establishing temporary and permanent
7 vegetation cover and for subsurface drains necessary for proper functioning of the waterway.

8 b. Removal of obstructions necessary to permit installation of an effective system.

9 (c) *Technical standards*. Technical standards from the NRCS field office technical guide
10 are as follows:

11 1. 412 - grassed waterway or outlet; June, 1993

12 2. 342 - critical area planting; November, 1999

13 3. 382 - fence; November, 1999

14 4. 500 - obstruction removal; January, 1983

15 5. 606 - subsurface drain; September, 1989 6. 645 - wildlife upland habitat management
16 June, 1987, and

17 7. 484 - mulching; July, 1987.

18 (7) HIGH RESIDUE MANAGEMENT SYSTEMS. (a) *Description*. High residue
19 management systems refer to any tillage and planting system that is designed to reduce soil
20 erosion caused by water or wind. This practice shall be implemented using one or more of the
21 technical standards in par. (c). These systems include the following:

22 1. No-till. The soil is left undisturbed prior to planting. Planting is completed in a narrow
23 seedbed or slot created by the planter or drill.

24 2. Mulch-till. The total soil surface is disturbed by tillage prior to planting. Tillage tools
25 such as chisels, field cultivators, disks or sweeps are used.

26 3. Ridge-till. The soil is left undisturbed prior to planting. The seedbed is prepared on
27 ridges with sweeps, disks or other row cleaners. The ridges are rebuilt for the next year's crop
28 during cultivation.

1 4. Strip-till. The soil is left undisturbed prior to planting. Tillage in the row is done at
2 planting using tools such as a rototiller, in row chisel, or other row cleaner.

3 (b) *Conditions*. 1. Cost-sharing may be provided on a per acre basis to convert to high
4 residue management systems.

5 2. Cost-sharing may not be provided to a landowner or land operator for both this practice
6 and cropland protection cover (green manure) for the same acreage in the same crop year without
7 prior departmental approval.

8 3. Cost-sharing may be provided for a maximum of 3 years, with a possible one year
9 extension with departmental approval, under this chapter.

10 4. Cost-sharing may not be provided for continuous no-till unless surface applications of
11 nutrients, including animal manure, are prohibited. Continuous no-till is defined as 3 or more
12 consecutive years.

13 5. Cost-sharing may be provided for nutrient management and pesticide management
14 under subs. (9) and (10) provided that the approved priority watershed plan, priority lake plan or
15 project grant application identifies these practices as eligible.

16 (c) *Technical standards*. 1. A minimum 30% residue coverage shall remain on the soil
17 surface after planting.

18 2. Tillage and planting shall occur as close to the contour as practical.

19 3. Residue cover may be from meadow, winter cover crop, small grain or row crop.

20 4. *Technical standards*. The practice shall meet the requirements in NRCS field office
21 technical guide, Technical Standard 329A – residue management, no till and strip till; May, 1998
22 or 329B, residue management mulch till; May 1998.

23 (8) NUTRIENT MANAGEMENT. (a) *Description*. Nutrient management is controlling
24 the amount, source, form, location and timing of application of plant nutrients, including organic
25 wastes, sludge, commercial fertilizers, soil reserves and legumes, for the purpose of providing
26 plant nutrients and minimizing the entry of nutrient to surface water and groundwater. This
27 practice shall be implemented using one or more of the technical standards in par. (c).

28 (b) *Conditions*. As part of a nutrient management plan, cost-sharing may be provided for:

1 1. Soil testing including residual nitrogen analysis. Cost-sharing for soil testing shall be
2 limited to an initial testing for purposes of plan preparation and another test 4 years after plan
3 preparation.

4 2. Manure nutrient analysis. Cost-sharing for manure nutrient analysis shall be limited to
5 an initial analysis for purposes of plan preparation and another analysis 4 years after plan
6 preparation.

7 3. Use of crop consulting services for the purpose of preparing and implementing a
8 nutrient management plan. To be eligible for cost-sharing, consultants shall meet the
9 certification requirements in ch. ATCP 50.

10 (c) *Technical standards.* NRCS field office technical standard; 590-nutrient management;
11 March, 1999.

12 (9) PESTICIDE MANAGEMENT. (a) *Description.* Pesticide management is
13 controlling the handling, disposal, type, amount, location and timing of application of pesticides
14 in order to minimize contamination of water, air and nontarget organisms. This practice shall be
15 implemented using one or more of the technical standards in par. (c).

16 (b) *Conditions.* 1. As part of a pesticide management plan, cost-sharing may be provided
17 for:

18 a. Spill control facilities with liquid-tight floors for pesticide handling areas. Spill control
19 facilities consist of structures designed to contain accidental spills or overflows from pesticide
20 mixing, loading and unloading operations for the purposes of groundwater and surface water
21 protection. The items eligible for cost-share funds associated with these facilities include, but are
22 not limited to) a sealed, liquid-tight, reinforced concrete pad for the mixing area; water-tight walls
23 or perimeter flow diversion structures to convey spills or contaminated water to the sump area;
24 perimeter flow diversion structures needed to convey surface water away from the mixing area; a
25 shallow sump collection area capable of storing spills, rinsate, washwater, and precipitation that
26 may leak or fall on the pad; roof structures and walls protecting the pad mixing area; approach
27 ramps; water supply systems needed for the facility; and sump pump alarm and recovery
28 systems.

1 b. Use of crop consulting services for the purpose of preparing and implementing an
2 integrated crop management plan for not more than 3 years per operation. To be eligible for cost-
3 sharing, consultants shall meet the certification requirements in ch. ATCP 50.

4 2. Operators shall adhere to the requirements of chs. ATCP 29 (pesticide use and control)
5 and ATCP 33 (pesticide bulk storage). ← notes →

6 3. Licensed commercial pesticide applicators, as described in s. ATCP 29.11, are not
7 eligible for cost-share funding for this practice.

8 4. Material storage buildings are not eligible for cost-sharing under this subsection.

9 (c) *Technical standards.* NRCS field office technical standard - 595-pest management;
10 January, 1991. 2. Designing Facilities for Pesticide and Fertilizer Containment, MWPS-37, 1st
11 ed. 1991.

12 (10) CROPLAND PROTECTION COVER (GREEN MANURE). (a) *Description.*

13 Cropland protection cover are close-growing grasses, legumes or small grain grown for seasonal
14 protection and soil improvement. This practice shall be implemented using one or more of the
15 technical standards in par. (c).

16 (b) *Conditions.* 1. Cost-sharing may be provided for the planting of cover and green
17 manure crops:

18 a. To control erosion during periods when the major crops do not furnish adequate cover;

19 b. To add organic material to the soil; or

20 c. To improve infiltration, aeration and tilth to the soil.

21 2. Cost-sharing may only be provided for those fields that contribute to the degradation of
22 water quality as a result of harvesting a crop during the growing season that either leaves the
23 field devoid of residue or lacks enough residue from the harvested crop to provide for adequate
24 surface protection.

25 3. Cost-sharing may not be provided to a landowner or land operator for both this practice
26 and high residue management systems for the same acreage in the same crop year without prior
27 departmental approval.

1 (c) *Technical standards*. NRCS field office technical guide: 340 - cover and green
2 manure crop (acre); May, 1986.

3 (11) INTENSIVE GRAZING MANAGEMENT (ROTATIONAL GRAZING). (a)

4 *Description*. Intensive grazing management is the division of pastures into multiple cells that
5 receive a short but intensive grazing period with high animal density followed by a period
6 suitable to allow for the recovery of the vegetative cover. Rotational grazing systems can correct
7 existing pasturing practices that result in degradation and should replace the practice of summer
8 dry-lots when this practice results in water quality degradation. This practice shall be
9 implemented using one or more of the technical standards in par. (c).

10 (b) *Conditions*. 1. Cost-sharing may be provided for the installment of rotational grazing
11 systems on croplands, animal lots or pastures that are currently contributing sediments, nutrients
12 or pesticides to a water source. This practice may be eligible if the average sediment delivery to
13 surface water for the croplands exceeds 0.33 of tolerable soil loss, as measured in tons per acre
14 per year and if the aggregate total soil loss from all cropland acres to be converted to a rotational
15 grazing system are eroding at a rate greater than 1.0 tolerable soil loss. This practice may also be
16 eligible if an animal lot that adversely affects groundwater or surface water, provided the animal
17 lot is permanently abandoned. In instances of eligibility due to soil loss or eligibility due to
18 animal lot abandonment, cost sharing may be provided for:

19 2. Practices that would remediate streambank erosion and streambank habitat
20 degradation.

21 3. Practices that would exclude livestock from woodlands, wildlife lands and recreational
22 lands.

23 4. The establishment of cattle access lanes that are stable and not prone to erosion. This
24 includes cattle crossings either on streams or severely eroded areas.

25 5. The development of permanent boundary and main paddock fences. This may include
26 perimeter fencing, lane fencing, portable fencing and gates.

27 6. The establishment of good seeding stands for pasture and hayland planting.

1 7. The development of a watering system including pipeline watering systems, pasture
2 watering systems, wells, spring developments and portable watering systems such as pumps,
3 pipes and tanks. The total cost-share of the watering system may not exceed \$2,000 for
4 components listed in this subparagraph.

5 8. The stabilization of a site eroding due to cattle access or cropland erosion through the
6 critical area planting processes.

7 (c) *Technical standards*. 1. Technical standards from the NRCS field office technical
8 guide are as follows:

9 a. 342 - critical area planting; November, 1999

10 b. 382 - fence; November, 1999

11 c. 560 - access road, cattle crossings; March, 1989

12 d. 512 - pasture and hayland planting; March, 1992

13 e. 472 - livestock exclusion; June, 1983

14 f. 580 - streambank protection; February, 1997

15 g. 561 - heavy use area; August, 1999 h. 642 - well; April, 1999

16 h. 510 - pasture and hayland management; December, 1984, and

17 i. 575 - animal trails and walkways. June, 1997.

18 2. UWEX Publication A3529 Wisconsin Pastures for Profit: A hands on guide to
19 rotational grazing-August, 1994.

20 *Note:* Copies of " Wisconsin Pastures for Profit: A hands on guide to rotational grazing,"
21 are on file with the department, the secretary of the state and the revisor of statutes. Copies may
22 be purchased from the department or from the university of Wisconsin-extension, UWEX Pub.
23 No. A3529.

24 (12) CRITICAL AREA STABILIZATION. (a) *Description*. Critical area stabilization is
25 the planting of suitable trees, shrubs, and other vegetation appropriate for controlling and
26 stabilizing sloped lands which are producing nonpoint source pollutants and lands which drain
27 into bedrock crevices, openings and sinkholes. This practice shall be implemented using one or
28 more of the technical standards in par. (c).

1 (b) *Conditions*. Trees may not be sold during the operation and maintenance period.

2 (c) *Technical standards*. Technical standards from the NRCS field office technical guide
3 are as follows:

4 1. 342 - critical area planting; November, 1999

5 2. 382 - fence; November, 1999

6 3. 386 - field borders; December, 1991

7 4. 472 - livestock exclusion; June, 1983

8 5. 484 - mulching; July, 1987

9 6. 500 - obstruction removal; January, 1983

10 7. 612 - tree planting; October, 1991

11 8. Interim - Crevice and sinkhole treatment; August, 1985, and

12 9. 645 - wildlife upland habitat management; June, 1987.

13 **(13) GRADE STABILIZATION STRUCTURES.** (a) *Description*. A grade stabilization
14 structure is a structure used to reduce the grade in a drainageway or channel to protect the
15 channel from erosion or to prevent the formation or advance of gullies. This practice shall be
16 implemented using one or more of the technical standards in par. (c).

17 (b) *Conditions*. 1. Cost-sharing may be provided for:

18 a. Channel linings, chutes, drop spillways and pipe drops of less than 15 feet in height to
19 discharge excess water.

20 b. Detention or retention structures, such as erosion control dams, desilting reservoirs,
21 sediment basins, debris basins or similar structures of less than 15 feet in structural height and
22 with maximum storage capacities of less than 15 acre-feet.

23 2. Cost-sharing may be provided for structures with embankments of 15 to 25 feet in
24 structural height or with maximum storage capacities of 15 to 50 acre-feet if the department
25 makes a determination in writing that all of the following apply:

26 a. Control of the site is needed to achieve the water quality objectives specified in an
27 approved priority watershed or lake plan or in the approved priority watershed plan, priority lake
28 plan or project grant application.

1 b. Construction of the structure is cost effective.

2 c. Failure of the structure would have minimum potential to endanger life or real or
3 personal property.

4 3. Cost-sharing may not be authorized for any grade stabilization structure on a navigable
5 stream or stream classified as supporting a fishery.

6 (c) Technical *standards*. Technical standards from the NRCS field office technical guide
7 are as follows:

8 1. 410 - grade stabilization structure; July, 1994

9 2. 350 - sediment basin; September, 1990

10 3. 638 - water and sediment control basin; September, 1989

11 4. 342 - critical area planting; November, 1999

12 5. 348 - diversion dam; March, 1987

13 6. 362 - diversion; September, 1989

14 7. 382 - fence; November, 1999

15 8. 412 - grassed waterway; June, 1993

16 9. 468 - lined waterway or outlet; June, 1993

17 10. 484 - mulching; July, 1987

18 11. 500 - obstruction removal; January, 1983

19 12. 620 - underground outlet; June, 1993

20 13. 356 - dike; DATE TO BE ADDED

21 14. 404 - floodway; DATE TO BE ADDED

22 15. 606 - subsurface drain; September, 1989, and

23 16. 638 - water and sediment control basin; September, 1989.

24 (14) AGRICULTURAL SEDIMENT BASINS. (a) *Description*. Agricultural sediment
25 basins are permanent basins designed and constructed to reduce the transport of pollutants to
26 surface waters and wetlands of sediment eroded from critical agricultural fields. This practice
27 shall be implemented using one or more of the technical standards in par. (c).

1 (b) *Conditions*. 1. Cost-sharing may be provided for the sediment basin including
2 embankments, principal and emergency spillway structures, including anti-seep collars,
3 dewatering outlet and outlet protection.

4 2. Cost-sharing may not be provided for:

5 a. Basins having embankments exceeding 25 feet in structural height or with maximum
6 storage capacity of more than 50 acre-feet.

7 b. Basins located where failure may result in loss of life.

8 3. Sediment basins with embankments of 15 to 25 feet in structural height or with
9 maximum storage capacities of 15 to 50 acre-feet in volume may be cost-shared only when
10 approved by the department, in writing, prior to construction. For the department to authorize
11 such cost-sharing, it shall make the following findings:

12 a. Control of the site is needed to achieve the water quality objectives specified in the
13 approved priority watershed plan, priority lake plan or project grant application.

14 b. Construction of the structure is cost effective.

15 c. Failure of the structure would have minimum potential to endanger life or real or
16 personal property.

17 (c) *Technical standards*. The sediment basin shall be designed consistent with technical
18 standards for construction site sediment basins in the *Wisconsin Construction Site Best*
19 *Management Practice Handbook*, WDNR Pub. WR-222, November 1993 Revision and the
20 NRCS field office technical standards from the NRCS field office technical guide as follows:

21 1. 350 - sediment basin; September, 1990

22 2. 342 - critical area planting; November, 1999

23 3. 382 - fence; November, 1999

24 4. 412 - grassed waterway; June, 1993

25 5. 468 - lined waterway or outlet; June, 1993

26 6. 484 - mulching; July, 1987

27 7. 393 - filter strip; January, 1984

28 8. 561 heavy use protection area; August, 1999, and

1 9. 620 – underground outlet; June, 1993.

2 (15) SHORELINE AND STREAMBANK PROTECTION. (a) *Description*. Shoreline or
3 streambank stabilization is the stabilization and protection of the banks of streams and lakes
4 against erosion and the protection of fish habitat and water quality from livestock access. This
5 practice shall be implemented using one or more of the technical standards in par. (c).

6 (b) *Conditions*. 1. The cost-share recipient is responsible for obtaining all permits for the
7 installation of the practice.

8 2. Cost-sharing may be provided:

9 a. For planting trees if approved by department fish manager.

10 b. For water pumps and other measures required to eliminate livestock access to water.

11 c. To install livestock and machinery crossings that will minimize disturbance of the
12 stream channel and banks.

13 d. For the design and placement of practices such as shaping and placement of vegetation,
14 riprap or structures which improve fishery habitat, or other materials on banks and shores
15 identified in an approved priority watershed plan, priority lake plan or the project grant
16 application, or in areas where streambank repair is the least costly alternative. Written
17 departmental approval is required for the stabilization of banks with structural heights higher
18 than 15 feet.

19 e. For required permits.

20 **Note:** A permit may be required under ch. 30, Stats., when installing this best
21 management practice. For more information, please contact the Bureau of Fisheries Management
22 and Habitat Protection, P.O. Box 7921, Madison, Wisconsin 53707.

23 3. Cost-sharing is not authorized for wood chunks, unsorted demolition material, brick,
24 plaster, blacktop and any other material that could produce leachates or would violate provisions
25 of statutes or administrative codes for use as riprap.

26 (c) *Technical standards*. 1. Technical standards from the NRCS field office technical
27 guide are as follows:

28 a. 580 - streambank and shoreline protection; February, 1997

1 b. 342 - critical area planting; November, 1999

2 c. 382 - fence; November, 1999

3 d. 472 - livestock exclusion; June, 1983

4 e. 612 - tree planting; October, 1991

5 f. 395 - fish stream improvement; June, 1987

6 g. 560 - access road; March, 1989

7 h. 614 - trough or tank; September, 1989

8 i. 510 - pasture and hayland management; December, 1984

9 2. Other technical standards:

10 a. U.S. department of transportation hydraulic engineering circulars numbers 11 and 15

11 b. American fisheries society's stream obstruction removal guidelines.

12 c. U.S. department of agriculture's Stream Habitat Improvement Handbook, publication
13 R8-TP-16, June 1992.

14 d. Natural Resources Conservation Service Engineering Field Handbook, Soil
15 Bioengineering for Upland Slope Protection and Erosion Reduction, Pub. 210-EFH, October,
16 1992.

17 *2. a. to d.*
Note: Copies of the materials described in subd. *a-d* may be inspected at the offices of
18 the department, 101 S. Webster Street, Madison; the Secretary of State, 30 W. Mifflin, Madison;
19 and the Revisor of Statutes, 131 W. Wilson, Suite 800, Madison.

20 **(16) VEGETATED RIPARIAN BUFFERS** *(a) Description.* Vegetated riparian buffers
21 are areas in which vegetation is enhanced or established to reduce or eliminate the movement of
22 sediment, nutrients and other nonpoint source pollutants to adjacent surface water resources or
23 groundwater recharge areas and to protect the banks of streams and lakes from erosion and to
24 protect fish habitat. This practice shall be implemented using one or more of the technical
25 standards in par. (c).

26 *(b) Conditions.* Cost-sharing may be provided only when the vegetated riparian buffers are used
27 consistent with the approved priority watershed plan, priority lake plan or project grant
28 application or approved priority watershed or lake plan. Cost-sharing may be provided for:

- 1 1. Permanent fencing to protect a riparian buffer
- 2 2. Establishment or enhancement of permanent vegetative cover in a riparian buffer
- 3 3. Mulch, fertilizer, seed, seedling trees and other necessary materials.

4 (c) Technical *standards*. NRCS field office technical guide technical standards are as follows:

- 5 1.342 – critical area planting; November, 1999
- 6 2. 382 – fence; November, 1999
- 7 3. 386 – field border; December, 1991
- 8 4. 393 – filter strip/riparian buffer; Interim' July, 1997
- 9 5. 472 – livestock exclusion; June, 1983
- 10 6. 484 – mulching; July, 1984, and
- 11 4. 645 – wildlife upland habitat management; June, 1987.

12 (17) LAKE SEDIMENT TREATMENT. (a) *Description*. Lake sediment treatment is a
13 chemical, physical or biological treatment of polluted lake sediments.

14 (b) *Conditions*. 1. Cost-sharing may be provided for:

15 a. Design and treatment of lake sediments with chemical compounds, including, but not
16 limited to, aluminum sulfate, sodium aluminate, ferric chloride, calcium hydroxide and calcium
17 carbonate.

18 b. Treatment of lake sediments with physical or biological methods including, but not
19 limited to, the aeration of water overlaying lake sediments and the biological manipulation of
20 organisms which exacerbate sediment contamination of overlaying lake water.

21 2. Cost-sharing may not be provided for the dredging of sediments.

22 3. Water quality objectives shall be achieved through the control of polluted lake
23 sediments.

24 4. Significant nonpoint sources of the pollution to the lake shall be controlled prior to
25 treatment of lake sediments.

26 5. The department prior to implementation shall approve the engineering design.

27 6. An appropriate permit, if required, and approval shall be obtained.

1 (c) *Technical standards.* The design and implementation of lake sediment treatments are
2 in accordance with standards approved by the department.

3 **(18) WETLAND RESTORATION.** (a) *Description.* Wetland restoration is the
4 construction of berms or destruction of the function of tile lines and drainage ditches to create
5 conditions suitable for wetland vegetation. This practice shall be implemented using one or more
6 of the Technical standards in par. (c).

7 (b) *Conditions.* Cost-sharing may be provided for:

- 8 1. Earth moving to construct or remove berms, levees or dikes;
- 9 2. Earth moving to fill in portions of drainage ditches;
- 10 3. Destruction of portions of tile lines; and
- 11 4. Vegetative cover needed to develop or restore wetlands consistent with the approved
12 priority watershed plan, priority lake plan or project grant application.

13 (c) *Technical standards.* NRCS field office technical guide technical standards 657 -
14 wetland restoration; January, 1999.

15 **(19) SHORELINE HABITAT RESTORATION FOR DEVELOPED AREAS.** (a)

16 *Description.* Shoreline habitat restoration is the establishment in developed areas of a shoreline
17 buffer zone of diverse native vegetation that extends inland and water-ward from the ordinary
18 high water mark. The shoreline habitat restoration design seeks to restore the functions provided
19 by the original, natural vegetation, and includes a mixture of native trees, shrubs, ground cover
20 or wetland species. This practice includes the following:

21 1. Natural recovery. Used where native vegetation will recover naturally when a site is
22 protected from disturbance, due to the presence of existing native plants, and adequate seed
23 sources and site conditions. This method may be applied to wet margins of lakes or rivers where
24 turf grasses are not well established and in shallow water areas adjacent to shoreland restoration
25 areas.

26 2. Accelerated recovery. Used in areas not suited for natural recovery. Native vegetation
27 is established by seeding and planting. This method shall be used in areas where dense turf



1 grasses have been maintained for several. This practice shall be implemented using one or more
2 of the technical standards in par. (c).

3 (b) *Conditions*. 1. Cost-sharing for shoreline habitat restoration may be approved when
4 existing shoreline vegetation lacks the structure or complexity to support habitat functions for
5 littoral and riparian areas.

6 2. Cost-sharing may be provided for plants, seed, mulch and erosion control materials.

7 3. Cost-sharing may be provided for labor and services necessary for installation, not to
8 exceed 70% of total practice costs, or not to exceed a cost containment policy developed by the
9 governmental unit for this practice

10 4. Cost-sharing may not be provided for the following:

11 a. Practice design.

12 b. Plants, seed, mulch or other materials not approved by the department.

13 c. Shoreline erosion control materials such as rip rap or biologs.

14 d. Material for stairs, walkways, paths or other access structures.

15 5. The following conditions shall be met in order for cost-sharing to be available:

16 a. No known violations of county and local shoreland zoning requirements are present on
17 the entire property.

18 b. Runoff from roofs, driveways or other hard surfaces on the property shall be
19 maintained in sheet flow with no channels or gullies, to the greatest extent possible. This can be
20 accomplished with downspout runoff spreaders, directing runoff to flat or gently sloping grassy
21 areas and minor landscaping to temporarily pond or spread out runoff. There may be no
22 channelized flow through the restoration area. Where fertilizers are desired outside the buffer
23 area, zero-phosphorus types shall be used unless soil tests specifically indicate a need for
24 phosphorus and the project sponsor approves its use.

25 c. No changes in land use or management may occur that cause increased pollution to
26 surface water from sources that were controlled prior to the installation of a shoreline habitat
27 restoration practice.

28 6. The following dimensions or restrictions apply to the restoration °

1 a. The buffer created by shoreline habitat restoration shall extend the entire length of the
2 lot along the shoreline except that a viewing and access corridor is allowed, which corridor will
3 not be eligible for cost-sharing. Such corridors may not exceed 30 feet in width and may
4 encompass no greater than 30% of the property for lots less than 100 feet wide. The restoration
5 area design may include the provision of water access, the enhancement of desirable views, the
6 screening of unwanted views and consideration of privacy. Where buildings are set back 50 feet
7 or more, the buffer shall extend at least 35 feet inland from the ordinary high water mark. Where
8 buildings are set back less than 50 feet, the no-touch zone must extend to within 15 feet of the
9 structure.

10 b. Shallow water areas that are capable of supporting aquatic vegetation waterward of the
11 ordinary high water mark shall be managed as a no-touch zone. Areas waterward of the viewing
12 and access corridor are exempt from this condition.

13 c. An evaluation of existing vegetation on the site is necessary prior to the selection of
14 plant materials and restoration method. The natural vegetation that occurs in the region or
15 vicinity of the restoration site shall be considered in developing restoration plans.

16 d. In order to restore the functional values of the vegetative buffer, it must consist of three
17 layers: a ground cover, a shrub layer and a tree canopy. Vegetation in all three layers shall be
18 vigorous, diverse and structurally complex. The only exception to this requirement should be
19 where natural conditions in the region lack these characteristics.

20 e. Vegetation shall be adapted to the local soils, climate and the surrounding vegetation.
21 Only species approved by the project sponsor may be planted. Native species are required, and
22 certain invasive species such as reed canary grass and purple loosestrife are prohibited.

23 f. The project sponsor shall identify the most appropriate recovery methods for each
24 individual site.

25 7. The following conditions apply to practice installation:

26 a. Refer to compliance with local NRCS planting recommendations to determine
27 recommended planting dates for ground covers, shrubs and trees.

1 b. Exposure of bare soil shall be kept to an absolute minimum by using methods such as
2 black plastic covers to remove competing weeds. All exposed soils shall be mulched. A
3 temporary seeding is required on sites where permanent ground cover will not be established
4 until the following year. A temporary or companion seeding is required on any exposed slopes
5 exceeding 12%. Mulching and netting or erosion control matting is required on slopes exceeding
6 20%.

7 c. Zero-phosphorus start-up fertilization is permitted. Phosphorus application is only
8 permitted where soil tests indicate deficiencies.

9 d. Herbicides approved for use near water may be used only where essential, and with the
10 approval of the project sponsor.

11 e. Heavy equipment is prohibited, except where specifically approved by the project
12 sponsor, to prevent soil compaction. If heavy equipment is used, tree roots shall be protected by
13 not driving over the root zone.

14 8. The following conditions apply to practice operation and maintenance:

15 a. All buffer areas are to be managed as no-touch zones.

16 b. Fertilizers are prohibited after the buffer is established.

17 c. Herbicides are prohibited except as approved by the project sponsor, where this is the
18 best method to control undesirable invasive species.

19 d. Burning to clear or maintain buffer areas must be approved by the project sponsor, and
20 is limited to regions where prairies are the natural habitat.

21 e. Cutting of trees or shrubs may be done only to prevent safety hazards, or to remove
22 undesirable competitive species, and shall be approved by the project sponsor.

23 f. The forest floor duff layer and leaf litter must remain intact to provide a continuous
24 ground cover and meet the habitat functions of this practice.

25 g. Lawn mowing is permitted in the viewing and access corridors. Elsewhere, mowing is
26 prohibited except in established prairie buffer areas, and in accordance with a mowing plan
27 approved by the project sponsor. In viewing and access corridors, mowing is allowed to a
28 minimum height of 10 inches, and only as needed to reduce competition from undesirable

1 species. Mowing may occur only between August 1 and September 1 to avoid disturbance of
2 nesting birds and allow regrowth before winter.

3 h. Vehicles, boats, docks or other equipment storage shall be excluded from the
4 restoration area to prevent soil compaction and damage to the buffer vegetation. Boats and
5 docks may be temporarily stored during non-growing seasons as long as vegetative cover is
6 unaffected.

7 i. The access corridor may not channel runoff to the waterbody and shall be located to
8 avoid areas of high runoff or erodible soils. Grass or other cover that will hold the soil is required
9 for the access corridor.

10 j. Except for areas waterward of the access corridor, areas waterward of the buffer shall
11 be managed as no-touch zones.

12 (c) *Technical standards.* 1. UW Extension Publication GWQ014, *Shoreline Plants and*
13 *Landscaping*, DNR Publication PUBL-WM-228, *Home on the Range - Restoring and*
14 *Maintaining Grasslands for Wildlife*, or similar publications as approved by the project sponsor.

15 (20) BARNYARD RUNOFF MANAGEMENT. (a) *Description.* Barnyard runoff
16 management is the use of structural measures to contain, divert, retard, treat, collect, convey,
17 store or otherwise control the discharge of surface runoff from outdoor areas of concentrated
18 livestock activity. Measures include, but are not limited to, gutters, downspouts and diversions to
19 intercept and redirect runoff around the barnyard, feeding area or farmstead.—This practice shall
20 be implemented using one or more of the technical standards in par. (c).

21 (b) *Conditions.* 1. Cost-sharing may not be provided if:

22 a. The operator intentionally aggravated a pollution discharge for the purpose of
23 receiving cost-sharing.

24 b. The discharge could be prevented through improved management practices at nominal
25 costs.

26 c. The operator could have prevented the discharge by means of a previously agreed
27 operations and maintenance plan with the department, the Department of Agriculture, Trade and

1 Consumer Protection, the county land conservation committee of the Natural Resources
2 Conservation Service.

3 2. Cost-sharing may not be provided for:

4 a. Costs to design or construct a barnyard that is not installed.

5 b. Costs to construct or modify a building. This paragraph does not apply to a
6 modification that is essential for the installation of a barnyard runoff control system or to the
7 construction of a roof system pursuant to s. NR 154.20.

8 c. Costs for equipment to apply manure to land.

9 d. Costs resulting from anticipated changes in livestock numbers, housing or
10 management.

11 3. Cost-sharing may be provided for:

12 a. Diversions, gutters, downspouts, collection basins, infiltration areas, filter strips,
13 waterway outlet structures, piping, land shaping and filter walls needed to manage runoff from
14 areas where livestock manure accumulates.

15 b. Concrete paving of portions of yards necessary to support walls, necessary to enable
16 proper yard scraping and used as a settling basin.

17 c. Concrete paving of all or portions of the yard required to protect groundwater when
18 specified in the approved priority watershed plan, priority lake plan, NR 243 project or other
19 project grant application.

20 (c) *Technical standards.* 1. Technical standards from the NRCS field office technical
21 guide are as follows:

22 a. 362 - diversion; September, 1989

23 b. 558 - roof runoff management; March, 1996

24 c. 342 - critical area planting; November, 1999

25 d. 561 - heavy use area protection; August, 1999

26 e. 382 - fence; November, 1999

27 f. 412 - grassed waterway; June, 1993

28 g. 468 - lined waterway or outlet; June, 1983

1 h. 484 - mulching; July, 1987

2 i. 620 - underground outlet; June, 1993

3 j. 350 - sediment basin; September, 1990

4 k. 533- pumping plant for water control; September, 1986 and

5 l. 590 - nutrient management; March, 1999' and

6 m. 312 - waste management system; January 1987.

7 2. Other standards as approved by the department.

8 **(21) ANIMAL LOT ABANDONMENT OR RELOCATION.** (a) *Description.* Animal lot
9 relocation is relocation of an animal lot from a site such as a floodway to a suitable site to
10 minimize the amount of pollutants from the animal lot to surface or ground waters. This practice
11 does not include the purchase of land. This practice shall be implemented using one or more of
12 the technical standards in par. (c).

13 (b) *Conditions.* 1. Cost-sharing may be provided for:

14 a. Stabilization and abandonment of a site, which does or does not include relocation to a
15 different site owned, operated or controlled by the cost-share recipient. For abandonment of a
16 site which does not include relocation, the site shall either have been in existence for a minimum
17 of 3 years and found to be a significant nonpoint source of pollution, have been issued a notice of
18 discharge under ch. NR 243, or have been identified during a watershed inventory as being a
19 nonpoint source of pollution and listed as eligible in the approved priority watershed plan,
20 priority lake plan or project grant application.

21 b. Reconstruction or replacement of buildings and other structures necessary for the
22 relocation of the animal lot.

23 c. Proper abandonment of wells required as a result of the relocation of the animal lot.

24 d. Runoff management practices needed on the relocated lot consistent with subs. (17),
25 (19) and (20).

26 e. Stabilization and abandonment of a previously used earthen animal lot which has either
27 been in existence for a minimum of 3 years and is found to be a significant nonpoint source of
28 pollution or has been identified during a watershed inventory as being a nonpoint source of

1 pollution and is listed as eligible in the approved priority watershed plan, priority lake plan or
2 project grant application.

3 2. Wells shall be properly abandoned in accordance with the requirements of ch. NR 812.

4 3. The landowner agrees to abandon the existing site permanently for livestock use and
5 agrees to record a restrictive covenant to this effect in the office of the register of deeds for each
6 county in which the property is located. The restrictive covenant shall permanently exclude the
7 use of the property by livestock. A maximum of 10 animals may be kept on the site, provided
8 that no more than 4 individual animals exceed a live weight of 200 pounds and the desired level
9 of pollutant control for the site is maintained.

10 4. A plan for relocation shall be approved by the governmental unit, in writing, prior to
11 initiation of relocation. The project grant application shall list criteria for relocation plan
12 approval. At a minimum, these criteria shall include the following:

13 a. The site is identified as eligible in the approved priority watershed plan, priority lake
14 plan or project grant application.

15 b. The relocation to a site owned, operated or controlled by the cost-share recipient is cost
16 effective provided the cost-sharing for repairing, reconstructing or replacement of buildings and
17 other structures at the relocation site does not exceed the appraised values of the buildings and
18 other structures to be abandoned which have utility for livestock operations.

19 c. The relocated lot will not significantly contribute to a water quality problem.

20 5. If the cost-share recipient has received state cost-share funding at the site to be
21 abandoned for practices listed in this paragraph, the amount of cost-sharing received shall be
22 deducted from the relocation cost-share payment.

23 6. In cases of abandonment which does not include relocation to a different site owned,
24 operated or controlled by the cost-share recipient, livestock may not be relocated to a site which
25 will significantly contribute to surface or groundwater quality degradation. A written plan shall
26 be submitted to the governmental unit for approval detailing the disbursement of the animals.

27 7. The abandonment of a site without relocation to a site owned, operated or controlled
28 by the cost-share recipient is cost-effective provided the cost-share grant does not exceed the

1 estimated cost-share grant of the best management practices which would have been installed at
2 the abandoned site. The best management practice cost-effective requirement may be waived by
3 the department if the site to be abandoned has a significant water quality impact and the
4 proposed best management practice cannot ensure an acceptable level of water quality protection
5 when compared to relocation.

6 (c) *Technical standards*. Technical standards from the NRCS field office technical guide
7 are as follows:

- 8 1. 393 - filter strip; January, 1984
- 9 2. 362 - diversion; September, 1989
- 10 3. 558 - roof runoff management; March, 1996
- 11 4. 342 - critical area planting; November, 1999
- 12 5. 561 - heavy use area protection; August, 1999
- 13 6. 382 - fence; November, 1999
- 14 7. 412 - grassed waterway; June, 1993
- 15 8. 468 - lined waterway or outlet; June, 1993
- 16 9. 484 - mulching; July, 1987
- 17 10. 620 - underground outlet; June, 1993
- 18 11. 350 - sediment basin; September, 1990
- 19 12. 312 - waste management system; January, 1987
- 20 13. 500 - obstruction removal; January, 1983, and
- 21 14. 590 - nutrient management; March, 1999

22 **(22) WELL ABANDONMENT.** (a) *Description*. Well abandonment is the proper filling
23 and sealing of a well to prevent it from acting as a channel for contaminants to reach the
24 groundwater or as a channel for the vertical movement of surface water to groundwater. This
25 practice shall be implemented using one or more of the technical standards in par. (c).

26 (b) *Conditions*. 1. Cost-sharing may be provided for:

27 a. The removal of the pump, pump piping, debris or other obstacles that interfere with the
28 proper sealing of the well.

1 b. The sand-cement grout, sodium bentonite, clay slurry, chipped bentonite or concrete
2 used for the well sealing.

3 c. Chlorine used as a disinfectant.

4 d. The backfilling operations to fill the surface around a well pit.

5 e. The necessary labor costs to complete the proper abandonment.

6 2. Cost-sharing may not be provided for:

7 a. The abandonment of wells at an oil or gas drilling site or wells that produced gas or oil.

8 b. The abandonment of wells used for test or exploratory purposes.

9 c. The abandonment of mine shafts, drill holes or air vents associated with the mining
10 industry.

11 d. The abandonment of high capacity wells.

12 (c) *Technical standards.* 1. NRCS field office technical standard 642 – Well; April, 1999.

13 2. Section NR 812.26 on well and drillhole abandonment.

14 **(23) MANURE STORAGE FACILITIES.** (a) *Description.* A manure storage facility is a
15 structure which stores manure from operations where manure is generated or from operations
16 where the location and site characteristics of manure spreading areas result in a high potential for
17 runoff to carry pollutants to lakes, streams and groundwater during periods of frozen or saturated
18 conditions. The facility shall be necessary to accommodate proper land application of manure in
19 accordance with a nutrient management plan. This practice shall be implemented using one or
20 more of the technical standards in par. (c).

21 (b) *Conditions.* 1. A nutrient management plan for the operation is required.

22 2. Cost-sharing may be provided if:

23 a. The locations and site characteristics of areas where manure is spread have high
24 potentials to carry runoff to lakes and streams and the facilities are necessary to accommodate
25 proper land application of the manure in accordance with the nutrient management plan.

26 b. The existing storage or spreading of manure has a high potential for contaminating
27 groundwater as specified in the approved priority watershed plan, priority lake plan or project
28 grant application.

1 3. Cost-sharing may be provided for:

2 a. Aerobic or anaerobic basins, liquid manure tanks and solid manure stacking facilities,
3 piping and other stationary equipment necessary for conveying manure to the storage facility
4 required as part of a nutrient management plan.

5 b. Storage capacities of no less than 30 days and no more than 365 day manure
6 generation.

7 c. Leases of manure storage tanks subject to the restrictions of s. NR 120.18 (2) (c) and
8 153.16(2)(e).

9 d. The repair, modification or abandonment of existing manure storage facilities needed
10 to meet water quality objectives including well abandonment required under ch. NR 812.

11 e. Manure storage structures at operations where manure is generated.

12 4. Cost-sharing may not be provided if: *any... all...*

13 a. Manure can be spread at acceptable rates on locations which are nearly flat and
14 represent a minimal risk to surface and groundwater or which do not drain to surface
15 waters.

16 b. The landowner intentionally aggravated conditions in order to qualify for cost-sharing.

17 5. Cost-sharing may not be provided for:

18 a. Portable pumps and other nonstationary equipment; *or*

19 b. Buildings or modifications to buildings; *or*

20 c. Equipment for land applying or incorporating manure; *or*

21 d. Additional costs associated with the construction of a manure storage facility incurred
22 for the purpose of providing structural support for a building or other structure located over or
23 attached to the facility.

24 6. Runoff from solid manure stacking facilities shall be controlled.

25 7. Manure stored in the storage facility shall be land applied in accordance with the
26 operation's nutrient management plan. Manure stored in facilities designed to be emptied
27 annually or semi-annually may not be applied on frozen or saturated ground and shall be
28 incorporated within 3 days after application.

1 8. Basins shall be constructed to assure sealing of the bottom and sides to prevent
2 contamination of wells and groundwater.

3 9. The project sponsor prior to the payment of cost-share funds shall certify compliance
4 with the manure management prohibitions in ch. NR 151.08.

5 (c) 1. Technical standards from the NRCS field office technical guide are as follows:

6 a. 312 - waste management system; January, 1987

7 b. 313 - waste storage structure; September, 1998

8 c. 634 - Manure transfer; January, 1999,

9 d. 590 - nutrient management; March, 1999

10 e. 359 - waste treatment lagoon; DATE TO BE ADDED

11 f. 382 - fence; November, 1999

12 g. 561 - heavy use protection area; August, 1999, and

13 2. Other standards as specified by the department.

14 (24) ANIMAL WASTE STORAGE SYSTEM ABANDONMENT. (a) *Description.*

15 Manure storage system abandonment is the permanent disabling and proper abandonment of
16 leaking and improperly sited manure storage systems including, a system with bottom at or
17 below groundwater level; a system whose pit fills with groundwater; a system whose pit leaks
18 into the bedrock; a system which has documented reports of discharging manure into surface or
19 groundwater due to structural failure; or a system with evidence of existing structural failure or
20 evidence of imminent structural failure that will likely result in resource degradation. This
21 practice shall be implemented using one or more of the Technical standards in par. (c).

22 (b) *Conditions.* 1. Cost-sharing may be provided for the following practices to protect
23 water resources from contamination by manure:

24 a. Proper removal and disposal of accumulated wastes in the pond or structure;

25 b. Removal of any constructed soil liner, concrete or membrane liner;

26 c. Removal of all soil saturated with waste, which can be removed;

27 d. Proper land spreading of excavated liner material and waste saturated soil; and

28 e. Filling, shaping to insure surface drainage away from site, and seeding of area.

1 2. Cost-sharing may not be provided for removal and spreading of manure that can be
2 removed using conventional equipment and routine agricultural practices.

3 (c) *Technical standards*. 1. Technical standards from the NRCS field office technical
4 guide are as follows:

5 a. 312 - waste management system; January, 1987

6 b. 313 - waste storage structure; September, 1998

7 c. 634 - Manure transfer; January, 1999,

8 d. 590 - nutrient management; March, 1999

9 e. 359 - waste treatment lagoon; DATE TO BE ADDED

10 f. 382 - fence; November, 1999

11 g. 561 - heavy use protection area; August, 1999, and

12 2. Other standards as specified by the department.

13 **(25) MILKING CENTER WASTE CONTROL SYSTEMS.** (a) *Description*. A milking
14 center waste control system is a piece of equipment, practice or combination of practices
15 installed in a milking center for purposes of reducing the quantity or pollution potential of the
16 wastes. This practice shall be implemented using one or more of the technical standards in par.

17 (c).

18 (b) *Conditions*. 1. Cost-sharing may be provided for:

19 a. Design and construction of filter strip systems with appropriate pretreatment measures,
20 storage systems and land irrigation equipment.

21 b. Repair or modification of existing milking center waste control measures.

22 c. Stationary waste transfer equipment, such as piping and pumps, needed to convey
23 milking center wastes to storage, treatment or land application systems provided that the
24 equipment is an integral component of the system and is designed for that exclusive use.

25 d. Other milking center waste control measures when they are needed to assure that the
26 milking center waste treatment systems will meet identified water quality objectives. These
27 measures may include conservation sinks, pre-cooler water utilization systems, manifold

1 cleaning systems, air injection systems, waste milk diverter valves, booster pumps for parlor
2 floor cleaning and other measures as approved by the department.

3 2. Cost-sharing may not be provided for:

- 4 a. Design and construction of systems, practices or components that are installed or
5 adopted for purposes other than for the correction of an identified water pollution hazard.
- 6 b. Buildings or modifications to buildings, unless modifications to buildings are essential
7 for installation of a milking center waste control system.
- 8 c. Portable equipment for spreading milking center wastes onto land or incorporating the
9 wastes into land.

10 (c) *Technical standards.* 1. Technical standards from the NRCS field office technical
11 guide are as follows:

- 12 a. 393 - filter strip; January, 1984
- 13 b. 634 manure transfer January, 1999
- 14 c. 442 - irrigation system sprinkler; DATE TO BE ADDED
- 15 a. 614 - trough or tank.; September, 1989
- 16 b. 313 - waste storage; September, 1998
- 17 c. 590 - nutrient management; March, 1999

18 2. Milking center waste control systems shall be planned in accordance with the Pollution
19 Control Guide for Milking Center Wastewater Management (UWEX Pub. No. A3592-July,
20 1994), and designed in accordance with standards approved by the department.

21 **(26) ROOFS FOR BARNYARD RUNOFF MANAGEMENT AND MANURE**
22 **STORAGE FACILITIES.** (a) *Description.* Roofs for barnyard runoff management and manure
23 storage facilities are a roof and supporting structure constructed specifically to prevent
24 precipitation from contacting manure. This practice shall be implemented using one or more of
25 the technical standards in par. (c).

26 (b) *Conditions.* 1. Cost-sharing may not be provided for materials and labor for other
27 structures or buildings.

1 2. The roofed structure may not be permanently enclosed unless the landowner receives
2 written approval from the department.

3 a. For purposes of this subsection, ~~a~~ permanently enclosed structure is defined as a
4 structure where the sum of the walls exceeds 50% of the total length of the perimeter of the
5 structure. When the structure has a shape other than a rectangle or square, each rectangular or
6 square portion of the total structure, excluding the common sides, shall be calculated separately
7 to determine whether it exceeds 50%. A segment of the perimeter shall be considered a wall if
8 greater than 50% of the opening from eave to floor is of solid building material.

9 b. An application requesting the enclosure of a roofed barnyard runoff management
10 system shall be submitted in writing to the department for its approval. The written application
11 and the applicable cost-share agreement shall include a recognition by the landowner or land
12 operator that the barnyard may not be used for purposes other than an animal lot for the duration
13 of the cost-share agreement.

14 3. The livestock facility may not establish additional outdoor animal lots on the site
15 unless the department certifies that adequate runoff control practices are established for the
16 duration of the cost-share agreement.

17 (c) *Technical standards.* 1. The roof shall be designed to support wind, snow and other
18 live and dead loads consistent with the American Society of Agricultural Engineers (ASAE)
19 Engineering Practice (EP) 288.5, 1992.

20 Note: Copies of this publication are available for inspection at the central office of the
21 Department of Natural Resources, and the offices of the Revisor of Statutes and Secretary of
22 State.

23 2. The roof and supporting structure shall be constructed of materials with a life
24 expectancy of a minimum of 10 years.

25 3. The structure shall have sufficient ventilation.

26 **(27) LIVESTOCK FENCING.** (a) *Description.* Livestock fencing is the enclosure,
27 separation or division of one area of land from another in a manner that provides a permanent
28 barrier to livestock. The purpose of the practice is to exclude livestock from land areas that

1 should be protected from grazing or gleaning where degradation of the natural resource will
2 likely result if livestock access is permitted. This practice shall be implemented using one or
3 more of the technical standards in par. (c).

4 (b) *Conditions*. 1. Cost-sharing may be provided for permanent fencing when fencing is
5 needed to:

- 6 a. Eliminate the degradation of a surface water body.
- 7 b. Reduce the impact to a resource from sedimentation that is being caused by livestock.
- 8 c. Exclude livestock from a forest or woodlot.
- 9 d. Eliminate the degradation of other natural resources as defined within the approved
10 priority watershed plan, priority lake plan, notice of discharge or project grant application.

11 2. Cost-sharing may not be provided for:

- 12 a. Fencing of cropland fields for the primary purpose of providing areas for gleaning by
13 livestock or for handling or segregating of livestock.
- 14 b. Temporary fencing.
- 15 c. Situations where benefits to water quality improvement cannot be readily defined.
- 16 d. Electric fence energizers.

17 **Note:** The preferable method is to have cattle mound runoff captured and treated within
18 the filtration or containment system for the planned barnyard.

19 **(28) STRUCTURAL URBAN BEST MANAGEMENT PRACTICES.** (a) *Description*.

20 Structural urban best management practices are source area measures, transport system and end-
21 of-pipe measures designed to control storm water runoff rates, volumes and discharge quality.
22 These practices will reduce the amount of pollutants carried in runoff and flows destructive to
23 stream habitat. These measures include, but are not limited to, practices such as infiltration
24 trenches, porous pavement, oil water separators, sediment chambers, sand filtration units, grassed
25 swales, infiltration basins and detention/retention basins.

26 (b) *Conditions*. 1. Cost-sharing may be provided for:

- 27 a. Excavation, grading, mulching, seeding, necessary landscaping, piping, drop spillways
28 and other measures required to implement the practice.

1 b. Land acquisition, including storm sewer rerouting and the removal of structures
2 necessary to install structural urban best management practices.
3 c. Materials and labor for the initial installation of groundwater monitoring wells required
4 by the department.

5 d. On a prorated basis, for multi-purpose practices which manage both water quality and
6 unrelated water quantity problems.

7 2. Cost-sharing under this chapter may not be provided for:

8 a. Land acquisition, storm sewer rerouting or removal of structures where the practices
9 serve solely to solve drainage and flooding problems unrelated to the primary water quality
10 improvement strategy in a priority watershed or lake plan or application selected for funding
11 under this chapter.

12 b. Removal or disposal of accumulated sediments or other materials needed to properly
13 maintain the practice.

14 (c) *Review and approval procedures.* 1. The department shall identify acceptable
15 technical standards for each best management practice in an approved priority watershed plan,
16 approved priority lake plan or project grant.

17 2. The department shall consider documents containing technical standards developed
18 under the process in ch. NR 151.15 and other documents when identifying acceptable technical
19 standards.

20 3. The governmental unit, landowner or land operator shall submit preliminary designs
21 for each identified alternative to the department for review and comment.

22 4. Based on the review of the preliminary designs for each alternative, the governmental
23 unit, landowner or land operator shall submit a detailed design including pertinent information
24 addressing each criteria listed in subd. 5., for the selected alternative prepared by a registered
25 professional engineer or other individual trained in the design of the practice and approved by
26 the department, to the department for review and approval.

27 5. The department shall approve or disapprove within 90 days the detailed design based
28 on the following criteria:

1 a. Adequacy of pollutant control to protect surface water, ground water and wetland
2 resources in accordance with the objectives of a watershed plan. Applicable performance
3 standards identified in subch. I of ch. NR 151 may be considered and addressed in the detailed
4 design.

5 b. Consistency with water quality provisions of department approved plans, such as
6 priority watershed or lake plans, integrated resource management plans, remedial action plans or
7 wellhead protection plans, or with existing local storm water management ordinances or plans
8 that meet minimum department requirements.

9 c. Structural integrity of the design.

10 d. Aesthetics.

11 e. The degree to which other environmental considerations are integrated in the proposal.

12 f. The adequacy of the provisions for long-term maintenance of the structural practice.

13 g. Other pertinent factors.

14 6. The department may waive or modify the review or approval procedures under subds.
15 3. to 5. Any waiver shall be specifically described in the grant agreement or the cost-share
16 agreement.

17
18 The foregoing rule was approved and adopted by the State of Wisconsin Natural
19 Resources Board on _____.

20
21 The rule shall take effect on the first day of the month following publication in the
22 Wisconsin administrative register as provided in s. 227.22(2)(intro.), Stats.

23
24 Dated at Madison, Wisconsin _____

25
26 STATE OF WISCONSIN
27 DEPARTMENT OF NATURAL RESOURCES

28
29
30
31 By _____

32 George E. Meyer, Secretary

33 (SEAL)