

1.1 **Pollution Control Agency**1.2 **Proposed Permanent Rules Related to Petroleum-Contaminated Soil Management**1.3 **7037.0100 DEFINITIONS.**1.4 [For text of subps 1 to 24, see M.R.]

1.5 Subp. 25. **Soil texture.** "Soil texture" means the relative portion of sand, silt,
1.6 and clay in a soil, as determined using the methods given in part 7037.3300, subpart
1.7 4. The soil textural classifications of the United States Department of Agriculture,
1.8 Natural Resources Conservation Service, are used for this chapter. These soil textural
1.9 classifications are provided in ~~the publication entitled "Soil Taxonomy: A Basic System of~~
1.10 ~~Soil Classification for Making and Interpreting Soil Surveys," written and published by~~
1.11 ~~the United States Department of Agriculture, USDA-SCS Agricultural~~ Natural Resources
1.12 Conservation Service, USDA-NRCS Agriculture Handbook No. 436, 1975 (1999).

1.13 [For text of subps 26 and 27, see M.R.]

1.14 Subp. 27a. **Total petroleum hydrocarbons.** "Total petroleum hydrocarbons" means
1.15 the concentration of gasoline range organics, diesel range organics, or extended range
1.16 organics detected in soil samples collected and analyzed according to parts 7037.0500
1.17 and 7037.3100.

1.18 [For text of subps 28 to 31, see M.R.]

1.19 Subp. 32. **Wetland.** "Wetland" means "wetlands" and "public waters wetlands" as
1.20 defined in Minnesota Statutes, section ~~103G.141~~ 103G.005, subdivisions ~~18~~ 15a and 19.

1.21 **7037.0400 PETROLEUM-CONTAMINATED SOIL TREATMENT OPTIONS.**

1.22 Subpart 1. **Treatment and disposal options.** A generator shall treat or dispose of
1.23 petroleum-contaminated soil in accordance with one of the methods in items A to D:

1.24 [For text of items A and B, see M.R.]

2.1 C. thermal treatment by a soil roaster which has received an agency air emission
 2.2 permit in accordance with parts 7001.0010 to 7001.0210 and chapters ~~7005~~, 7007, 7009,
 2.3 7011, 7017, 7019, 7021, 7023, 7025, ~~7028~~, 7030, and 7035; or

2.4 [For text of item D, see M.R.]

2.5 [For text of subp 2, see M.R.]

2.6 **7037.0500 SAMPLING AND ANALYSIS OF PETROLEUM-CONTAMINATED**
 2.7 **SOIL.**

2.8 [For text of subp 1, see M.R.]

2.9 Subp. 2. **General analysis requirements.** A generator shall analyze
 2.10 petroleum-contaminated soil for the parameters in the following table based on the
 2.11 contaminant or contaminants actually or potentially present in the soil using the required
 2.12 laboratory analysis methods given in part 7037.3100.

2.13 CONTAMINANT	PARAMETER CODES
2.14 Leaded gasoline, aviation gasoline	B, C, D , F
2.15 Unleaded gasoline, <u>ethanol blended fuels</u>	B, C, D
2.16 Fuel oil, motor oil , diesel fuel, kerosene, jet fuels, 2.17 <u>unused mineral oil or spirits, hydraulic fluids, crude oil</u>	B, E <u>D</u>
2.18 Used oil, <u>including motor oil, mineral oil, and</u> 2.19 <u>hydraulic fluids</u>	A, <u>D</u> , E, G, H
2.20 <u>Unused hydraulic fluids and motor oil</u>	<u>B, D, E</u>
2.21 <u>Unknown petroleum/hydrocarbon mixtures</u>	<u>A, C, D, E, G, H</u>
2.22 <u>Crude oil</u>	<u>A, D, E, G</u>
2.23 <u>Other petroleum products</u>	<u>I</u>

2.24 The parameter codes listed above correspond to the parameters as follows:

2.25 Code A - volatile organic compounds listed in ~~Minnesota Department of Health~~
 2.26 ~~method 465, revision D~~;

2.27 Code B - benzene, toluene, ethyl benzene, and xylenes;

2.28 Code ~~C~~ - methyl tertiary butyl ether;

3.1 Code ~~D~~ C - ~~total petroleum hydrocarbons as gasoline~~ range organics (GRO);
3.2 Code ~~E~~ D - ~~total petroleum hydrocarbons as fuel oil~~ diesel range organics (DRO);
3.3 Code E - extended range organics (ERO);
3.4 Code F - total lead;
3.5 Code G - arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver
3.6 constituents with waste codes D004 to ~~D017~~ D011 in part 7045.0131, subpart 8, unless
3.7 the generator has personal knowledge that those constituents are not present and prepares
3.8 a document containing the information in subpart 4; and
3.9 Code H - polychlorinated biphenyls (PCBs); and
3.10 Code I - must be analyzed for applicable parameters as determined by the
3.11 commissioner.

3.12 [For text of subp 3, see M.R.]

3.13 Subp. 4. **Additional evaluation of soil contaminated with used oil, unknown**
3.14 **petroleum mixtures, or crude oil.** A generator shall evaluate soil that is actually or
3.15 potentially contaminated with used oil, unknown petroleum mixtures, or crude oil to
3.16 determine whether it contains a hazardous waste in compliance with items A to C. If
3.17 personal knowledge is used to make a determination on the presence of hazardous waste
3.18 in the soil, the generator shall prepare a written document that sets forth the reasons
3.19 supporting the generator's conclusion that hazardous waste is not present and that states
3.20 that the information included in the document is true to the best of the generator's
3.21 knowledge. ~~The generator must sign and notarize this document.~~

3.22 [For text of items A and B, see M.R.]

3.23 C. A generator shall determine whether the soil exhibits the toxicity
3.24 characteristic of part 7045.0131, subpart 7, for the constituents included in code G
3.25 in subpart 2. If the total analysis for these constituents demonstrates that individual
3.26 constituents are present in the soil at levels equal to or greater than 20 times the toxicity

4.1 characteristic regulatory concentration levels as given in part 7045.0131, subpart 8, the
4.2 generator shall perform a ~~complete~~ TCLP.

4.3 **7037.0600 MANAGEMENT OF PETROLEUM-CONTAMINATED SOIL**
4.4 **CONTAINING HAZARDOUS WASTE.**

4.5 A generator shall manage petroleum-contaminated soil as a hazardous waste in
4.6 accordance with chapter 7045 if:

4.7 [For text of items A to C, see M.R.]

4.8 D. the ~~complete~~ TCLP of the soil displays the toxicity characteristic of part
4.9 7045.0131 for any of the constituents included in code G in part 7037.0500, subpart 2.

4.10 **7037.0700 EXEMPTIONS.**

4.11 Subpart 1. **Small quantities of petroleum-contaminated soil.** ~~For petroleum~~
4.12 ~~contaminated soil in volumes~~ Generators, owners, and operators managing less than
4.13 ten cubic yards, ~~the commissioner shall exempt generators and owners and operators~~
4.14 ~~from the requirement to comply with parts of this chapter if the commissioner finds that~~
4.15 ~~compliance with the part is not needed to protect human health and the environment. In~~
4.16 ~~determining whether to grant the exemption, the commissioner shall consider the actual or~~
4.17 ~~potential level of contamination; soil volume; proposed treatment; proposed treatment~~
4.18 ~~location; and the potential for presence of PCBs, halogens, metals, and other contaminants~~
4.19 ~~in the petroleum-contaminated soil~~ of petroleum-contaminated soil who comply with
4.20 parts 7037.0600; 7037.0900; 7037.1000, subparts 4, 5, and 6; 7037.1200, subpart 3;
4.21 7037.1600; 7037.1700; 7037.1800; 7037.1900; 7037.2300; and 7037.2400 are exempt
4.22 from the requirements of parts 7037.1100; 7037.1300; 7037.2600; and 7037.2700 if
4.23 petroleum-contaminated soil is applied at a maximum thickness of two inches.

4.24 [For text of subp 2, see M.R.]

5.1 **7037.1000 CRITERIA FOR LAND TREATMENT SITES.**5.2 [For text of subp 1, see M.R.]

5.3 Subp. 2. **Filter strips.** A land treatment site must have a downgradient filter strip
5.4 with a minimum width of 50 feet if the land treatment site is within 500 feet of any of
5.5 the following:

5.6 A. the ordinary high water level of either a trout stream ~~designated by the~~
5.7 ~~Department of Natural Resources Commissioner's Order No. 2294~~ or a trout lake
5.8 ~~designated by the Department of Natural Resources Commissioner's Order No. 2443~~
5.9 identified in part 7050.0420;

5.10 [For text of item B, see M.R.]

5.11 C. any intermittent stream, drainage ditch, or tile drainage inlet which directly
5.12 outlets to a trout stream, trout lake, or outstanding resource value water, as referenced
5.13 in this subpart.

5.14 The filter strip must otherwise be designed according to, or equivalent to, ~~Soil~~
5.15 Natural Resources Conservation Service, Conservation Practice Standard Code 393
5.16 ~~(USDA-SCS-MN, April 1986)~~ USDA-NRCS-MN, September 2011).

5.17 Subp. 3. **Run-on prevention.** A land treatment site must have adequate controls
5.18 to minimize run-on. If necessary, the owner or operator shall take measures to minimize
5.19 run-on, including construction of a diversion upgradient of the land treatment site that
5.20 is designed according to, or equivalent to, ~~Soil~~ Natural Resources Conservation Service,
5.21 Conservation Practice Standard Code 362 (USDA-SCS-MN ~~USDA-NRCS-MN,~~ July
5.22 ~~1989~~ 2010) or cropping of the land upgradient of the treatment site prior to spreading and
5.23 incorporation of petroleum-contaminated soil.

5.24 [For text of subps 4 to 6, see M.R.]

6.1 **7037.1800 PETROLEUM LOADING LIMITATIONS.**6.2 [For text of subp 1, see M.R.]

6.3 Subp. 2. **Gasoline-contaminated soil.** The following table lists the maximum
 6.4 allowable levels of gasoline contamination in petroleum-contaminated soil which may be
 6.5 spread at a land treatment site at a spreading thickness of four inches.

		Average total petroleum hydrocarbons as gasoline <u>GRO</u> concentrations (parts per million)			
Minimum organic matter (percentage)	Permeability (inches per hour)	Minimum thickness of suitable soil within treatment zone (feet)			
		2	3	4	
2	less than 6	NA	NA	1,000	
	less than 0.6	NA	1,000	2,500	
4	less than 6	NA	1,000	2,500	
	less than 0.6	1,000	2,500	5,000	

6.15 In this table "NA" means that petroleum-contaminated soil may not be spread under
 6.16 the specified conditions. "Minimum thickness of suitable soil" means the total soil
 6.17 thickness within the treatment zone having a permeability as listed in this table. Petroleum
 6.18 concentrations are based on average total petroleum hydrocarbon concentration in the soil
 6.19 determined by the sampling and analysis procedures of part 7037.0500, subparts 1 and 2.

6.20 Subp. 3. **Contaminated soil characterized as Fuel oil, motor oil, or crude**
 6.21 **oil-contaminated soil.** ~~Where the contamination is characterized as total petroleum~~
 6.22 ~~hydrocarbons as fuel oil,~~ The following table lists the maximum allowable levels of
 6.23 contamination in petroleum-contaminated soil which may be spread at a land treatment
 6.24 site at a spreading thickness of four inches.

		Average total petroleum hydrocarbons as fuel oil <u>DRO or</u> <u>ERO concentrations</u> (parts per million)		
Minimum organic matter (percentage)	Permeability (inches per hour)	Minimum thickness of suitable soil within treatment zone (feet)		
		2	3	4
	less than 6	NA	NA	1,000
	less than 0.6	NA	1,000	2,500
	less than 6	NA	1,000	2,500
	less than 0.6	1,000	2,500	5,000

7.1			2	3	4
7.2	2	0.6 to 6	NA	NA	2,000
7.3		less than 0.6	NA	2,000	5,000
7.4	4	0.6 to 6	NA	2,000	5,000
7.5		less than 0.6	2,000	5,000	10,000

7.6 In this table "NA" means that petroleum-contaminated soil may not spread under
 7.7 the specified conditions. "Minimum thickness of suitable soil" means the total soil
 7.8 thickness within the treatment zone having a permeability as listed in this table. Petroleum
 7.9 concentrations are based on average total petroleum hydrocarbon concentration in the soil
 7.10 determined by the sampling and analysis procedures of part 7037.0500, subparts 1 and 2.

7.11 [For text of subps 4 and 5, see M.R.]

7.12 **7037.2400 TILLAGE.**

7.13 Unless the plot has been seeded to a crop, tillage of the soil following the initial
 7.14 incorporation must be done in monthly cycles, excluding the period from November 1
 7.15 to April 1, until all soil monitoring samples taken under part 7037.2700 are less than ~~ten~~
 7.16 100 parts per million total petroleum hydrocarbons or until a minimum of four tillage
 7.17 cycles have been done, whichever is first. Tillage of the soil must be delayed until the soil
 7.18 moisture is increased if the soil lacks moisture such that tillage would cause wind erosion
 7.19 or decreased microbial activity.

7.20 **7037.2700 MONITORING AND REPORTING REQUIREMENTS.**

7.21 [For text of subps 1 and 2, see M.R.]

7.22 Subp. 3. **Frequency of sampling.** Monitoring of a plot in the year of spreading must
 7.23 be done at the times specified in the following table, until all soil analytical results in a
 7.24 single sampling round are ~~ten~~ 100 parts per million total petroleum hydrocarbons or less.

7.25	Soil Spreading Date	Soil Sampling in First Calendar Year
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8.1	<u>On or before July August 1</u>	Once in August and Once in October
8.2	July 1 to September 15	Once in October
8.3	After September 15 <u>August 1</u>	None

8.4 Monitoring in subsequent years must continue for those plots in which all soil
 8.5 analytical results are not ~~ten~~ 100 parts per million total petroleum hydrocarbons or less.
 8.6 These sampling events must be done in June, ~~August~~, and October.

8.7 [For text of subps 4 to 6, see M.R.]

8.8 **7037.3100 ANALYSIS OF PETROLEUM-CONTAMINATED SOIL SAMPLES.**

8.9 [For text of subp 1, see M.R.]

8.10 Subp. 2. **Specific analysis requirements.** Specific laboratory analysis requirements
 8.11 are given in items A to ~~E~~ H for selected parameters.

8.12 A. Analysis for the parameters of parameter code A in part 7037.0500, subpart
 8.13 2, must be done using purge-and-trap laboratory methodology in conjunction with the
 8.14 most recent version of EPA SW-846 Method 8010, Minnesota Department of Health
 8.15 method 466A, 8260 or an equivalent gas chromatography/mass spectrometry method.

8.16 B. Analysis for the parameters of parameter code B in part 7037.0500, subpart
 8.17 2, must be done using purge-and-trap laboratory methodology in conjunction with the
 8.18 most recent version of EPA SW-846 Method 8020 8021, 8260, or an equivalent gas
 8.19 chromatography method.

8.20 C. ~~Total petroleum hydrocarbons as gasoline~~ Gasoline range organics, code ~~D~~ C
 8.21 in part 7037.0500, subpart 2, must be done using the Wisconsin Department of Natural
 8.22 Resources Modified Gasoline Range Organics (GRO) method or other equivalent method
 8.23 approved by the agency.

8.24 D. ~~Total petroleum hydrocarbons as fuel oil~~ Diesel range organics, code ~~E~~ D
 8.25 in part 7037.0500, subpart 2, must be done using the Wisconsin Department of Natural

9.1 Resources Modified Diesel Range Organics (DRO) method or other equivalent method
9.2 approved by the agency.

9.3 E. Extended range organics, code E in part 7037.0500, subpart 2, must be
9.4 done using a solvent extraction, gas chromatography/flame ionization detector method
9.5 that quantifies the n-alkane range between C28 and C36 or other equivalent method
9.6 approved by the agency.

9.7 F. Total lead, code F in part 7037.0500, subpart 2, must be done using the most
9.8 recent version of EPA SW-846 Method 6010, 6020, or an equivalent method.

9.9 G. Arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver,
9.10 code G in part 7037.0500, subpart 2, must be done using the most recent version of EPA
9.11 SW-846 Method 6010, 6020, or an equivalent method. The most recent version of EPA
9.12 SW-846 Method 7471, or equivalent method, may be used for mercury.

9.13 E.H. PCBs, code H in part 7037.0500, subpart 2, must be done using the most
9.14 recent version of EPA SW-846 Method ~~8080~~ 8082 or an equivalent gas chromatography
9.15 method.

9.16 **7037.3300 CHARACTERIZATION OF NATIVE SOIL.**

9.17 Subpart 1. **Organic matter concentration.** Organic matter concentration in a native
9.18 soil must be determined using a method in one of the following references:

9.19 A. Recommended Chemical Soil Test Procedures for the North Central Region,
9.20 ~~Bulletin No. 499, October 1988, issued by the North Dakota State University Agricultural~~
9.21 ~~Experiment Station, Fargo, North Dakota~~ North Central Regional Publication 221
9.22 (revised), Missouri Agricultural Experiment Station, SB 1001 (January 1998).

9.23 [For text of item B, see M.R.]

9.24 [For text of subp 2, see M.R.]

10.1 Subp. 3. **Soil permeability.** Soil permeability must be reported as one of the
 10.2 following ranges in units of inches per hour: more than 6, 2.0 to 6, 0.6 to 2.0, or less than
 10.3 0.6. If the native soil at the land treatment site is mapped in a ~~Soil~~ Natural Resources
 10.4 Conservation Service soil survey, the soil permeability information in the soil survey or
 10.5 ~~Soil~~ Natural Resources Conservation Service soil interpretation records may be used. If
 10.6 the information is not available, then the soil permeability must be determined using one
 10.7 of the methods in items A to C.

10.8 A. Soil texture, as obtained or determined under subpart 4, may be used to
 10.9 estimate the soil permeability as given in the following table for United States Department
 10.10 of Agriculture, Natural Resources Conservation Service, textural classifications and
 10.11 permeabilities:

Soil texture classification	Permeability (inches per hour)
Gravel, sand, fine sand, loamy sand, loamy fine sand	more than 6
Sandy loam, fine sandy loam	2.0 to 6
Loam, silt loam, sandy clay loam	0.6 to 2.0
Clay loam, silty clay loam, sandy clay, silty clay, clay.	less than 0.6

10.19 [For text of items B and C, see M.R.]

10.20 Subp. 4. **Soil texture.** If the native soil at the land treatment site is mapped in a
 10.21 ~~Soil~~ Natural Resources Conservation Service soil survey, the United States Department
 10.22 of Agriculture soil textural information in the soil survey or ~~Soil~~ Natural Resources
 10.23 Conservation Service soil interpretation records may be used. If such information is not
 10.24 available, then the soil texture must be determined using one of the following references:

10.25 [For text of item A, see M.R.]

10.26 B. ~~Soil Survey Laboratory Methods and Procedures for Collecting Soil~~
 10.27 ~~Samples, issued by the Soil Conservation Service as Soil Survey Investigations Report 1~~

11.1 ~~(revised), Washington, D.C., United States Government Printing Office, 1972~~ Procedures
11.2 for Collecting Soil Samples and Methods of Analysis for Soil Survey, United States
11.3 Department of Agriculture, issued by the Natural Resources Conservation Service as
11.4 Soil Survey Investigations Report 1 (1984).

11.5 [For text of subp 5, see M.R.]

11.6 **7037.3700 INCORPORATIONS BY REFERENCE.**

11.7 Subpart 1. **In general.** For purposes of this chapter, the documents in subpart 2
11.8 are incorporated by reference. ~~They can be found at the Minnesota State Law Library,~~
11.9 ~~Minnesota Judicial Center, 25 Rev. Dr. Martin Luther King Jr. Blvd., Saint Paul,~~
11.10 ~~Minnesota 55155, or at the addresses indicated.~~ The documents are available through
11.11 the Minitex interlibrary loan system or on the Internet at the Web site specified. These
11.12 documents are not subject to frequent change.

11.13 Subp. 2. **Referenced standards.** The documents incorporated by reference in this
11.14 chapter are listed in items A to ~~G~~ F:

11.15 [For text of item A, see M.R.]

11.16 B. ~~Minnesota Department of Health, Public Health Laboratory Division, 717~~
11.17 ~~Delaware Street Southeast, Minneapolis, Minnesota 55440~~ Test Methods for Evaluating
11.18 Solid Waste, Physical/Chemical Methods, United States Environmental Protection Agency
11.19 (EPA), SW-846, On-Line Test Methods.

11.20 (1) EPA SW-846 Method 8010 8260B, Halogenated Volatile Organics
11.21 ~~(1986)~~ Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (1996
11.22 and as subsequently amended);

11.23 (2) EPA SW-846 Method 8020 8021B, Aromatic Volatile Organics (1986)
11.24 and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or
11.25 Electrolytic Conductivity Detectors (1996 and as subsequently amended);

12.1 (3) EPA SW-846 Method 8080 8082A, Organochlorine Pesticides and
12.2 PCBs (1986) Polychlorinated Biphenyls (PCBs) by Gas Chromatography (2007 and as
12.3 subsequently amended);

12.4 (4) ~~Minnesota Department of Health method 465, revision D,~~
12.5 ~~Determination of Volatile Organics in Water by Purge-and-Trap Method (1989); and~~

12.6 (5) ~~Minnesota Department of Health method 466A, Determination of~~
12.7 ~~Volatile Organics in Liquids and Solids by Purge-and-Trap Method (1984).~~

12.8 (4) EPA SW-846 Method 6010C, Inductively Coupled Plasma-Atomic
12.9 Emission Spectrometry (2007 and as subsequently amended);

12.10 (5) EPA SW-846 Method 6020A, Inductively Coupled Plasma-Mass
12.11 Spectrometry (2007 and as subsequently amended); and

12.12 (6) EPA SW-846 Method 7471B, Mercury in Solid or Semisolid Waste
12.13 (Manual Cold-Vapor Technique) (2007 and as subsequently amended).

12.14 C. ~~Minnesota Department of Natural Resources, 500 Lafayette Road, Saint~~
12.15 ~~Paul, Minnesota 55155.~~

12.16 (1) ~~Regulations Designating Trout Lakes, Superseding Commissioner's~~
12.17 ~~Order No. 2230 (Commissioner's Order No. 2443; May 12, 1992); and~~

12.18 (2) ~~Regulations Designating Trout Streams and Regulating the Taking of~~
12.19 ~~Fish Therein, Superseding Commissioner's Order No. 2089 (Commissioner's Order No.~~
12.20 ~~2294; March 18, 1988).~~

12.21 D.C. ~~North Dakota State University Agricultural Experiment Station, Fargo,~~
12.22 ~~North Dakota 58105. Recommended Chemical Soil Test Procedures for the North~~
12.23 ~~Central Region Bulletin No. 499 (October 1988), North Central Regional Publication~~
12.24 ~~221 (revised), Missouri Agricultural Experiment Station, SB 1001 (January 1998)~~
12.25 ~~<http://extension.missouri.edu/explorepdf/specialb/sb1001.pdf>.~~

13.1 E D. Wisconsin Department of Natural Resources, Box 7921, Madison,
13.2 Wisconsin 53707.

13.3 (1) Modified GRO Method for Determining Gasoline
13.4 Range Organics (Modified GRO Method) PUBL-SW-140 (undated 1995)
13.5 <http://dnr.wi.gov/regulations/labcert/documents/methods/grosep95.pdf>; and

13.6 (2) Modified DRO Method for Determining Diesel Range
13.7 Organics (Modified DRO Method) PUBL-SW-141 (undated 1995)
13.8 <http://dnr.wi.gov/regulations/labcert/documents/methods/drosep95.pdf>.

13.9 F E. United States Department of Agriculture, Soil Natural Resources
13.10 Conservation Service, 600 Farm Credit Building, 375 Jackson Street, Saint Paul,
13.11 Minnesota 55101.

13.12 (1) Diversion (Conservation Practice Standard Code 362, July 1989 2010)
13.13 <http://efotg.sc.egov.usda.gov/references/public/MN/362mn.pdf>; and

13.14 (2) Filter Strip (Conservation Practice Standard Code 393, April 1986
13.15 September 2011) <http://efotg.sc.egov.usda.gov/references/public/co/co393.pdf>.

13.16 G F. United States Government Printing Office, Washington, D.C. 20401.

13.17 (1) Soil Survey Laboratory Methods and Procedures for Collecting Soil
13.18 Samples, Soil Survey Investigations Report 1 (revised) (1972) Procedures for Collecting
13.19 Soil Samples and Methods of Analysis for Soil Survey, United States Department of
13.20 Agriculture, issued by the Natural Resources Conservation Service as Soil Survey
13.21 Investigations Report 1 (1984); and

13.22 (2) Soil Taxonomy: A Basic System of Soil Classification for Making
13.23 and Interpreting Soil Surveys, USDA-SCS Agricultural United States Department
13.24 of Agriculture, Natural Resources Conservation Service, USDA-NRCS Agriculture
13.25 Handbook No. 436 (1975 1999).

- 14.1 **TERM CHANGE.** The term "Soil Conservation Service" is changed to "Natural
- 14.2 Resources Conservation Service" wherever the term appears in Minnesota Rules, chapter
- 14.3 7037.