

## Chapter NR 718

### MANAGEMENT OF CONTAMINATED SOIL OR SOLID WASTES EXCAVATED DURING RESPONSE ACTIONS

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**Note:** Corrections made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1998, No. 516.

**NR 718.01 Purpose.** This chapter establishes minimum standards for the storage, transportation, treatment and disposal of contaminated soil and certain other solid wastes excavated during response actions conducted in accordance with the requirements of chs. NR 700 to 754. Where responsible parties have chosen to comply with the requirements of this chapter, the responsible parties are exempt from the storage, transportation, treatment and disposal requirements in ch. 289, Stats., and chs. NR 500 to 538, except where solid waste program requirements are specifically referenced in this chapter. This chapter is adopted pursuant to ss. 287.03, 289.05, 289.06, 289.43 (8), 289.67, and 227.11 (2), Stats., and ch. 292, Stats.

**Note:** This chapter exempts responsible parties who conduct specific types of response actions from obtaining site-specific approvals from the state's solid waste program, when the response actions are conducted in accordance with this chapter. The exemptions that responsible parties may be eligible for under this chapter are from any one of the following solid waste program requirements:

1. Licensing of on-site and off-site contaminated soil storage piles.
2. Licensing of on-site and off-site contaminated soil treatment.
3. Licensing of transportation in vehicles containing contaminated soil when the vehicles are owned by the responsible parties.
4. Approval for disposal of contaminated soil and other solid wastes on the same property from which it was excavated.
5. Approval for disposal of specified types of contaminated soil on property other than that from which it was excavated.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; am. Register, February, 1996, No. 482, eff. 3-1-96; correction made under s. 13.93 (2m) (b) 7., Stats., Register, March, 2001, No. 543; correction made under s. 13.92 (4) (b) 7., Stats., Register February 2010 No. 650; **CR 12-023: am. Register October 2013 No. 694, eff. 11-1-13; correction made under s. 13.92 (4) (b) 7., Stats., Register October 2013 No. 694.**

**NR 718.02 Applicability.** (1) This chapter applies to the storage, transportation, treatment and disposal of all the following:

(a) Contaminated soil which:

1. Is excavated as part of a response action conducted pursuant to chs. NR 700 to 754, at sites or facilities subject to regulation under s. 289.67, Stats., or ch. 292, Stats., or sites where remedial action is being taken by a person who is seeking the liability exemption under s. 292.15, Stats.; and

2. Is not a hazardous waste as defined in s. NR 660.10 (52) or 42 USC 6901 to 6991, as amended.

**Note:** Guidance document RR-705 entitled: "Guidance for Hazardous Waste Remediation" provides detailed information on the requirements that apply and the options that are available when dealing with cleanup and redevelopment issues at sites that are or may be contaminated with hazardous waste. A copy of the document can be found at: <http://dnr.wi.gov/files/PDF/pubs/r/RR705.pdf>.

(b) Solid waste which:

1. Contains materials other than contaminated soil and is excavated during a response action conducted pursuant to chs. NR 700 to 754, at sites or facilities subject to regulation under s. 289.67, Stats., or ch. 292, Stats., or sites where remedial action is being taken by a person who is seeking the liability exemption under s. 292.15, Stats.;

2. Is not a hazardous waste as defined in s. NR 660.10 (52) or 42 USC 6901 to 6991, as amended; and

3. Is replaced at the same site or facility from which it was excavated.

(2) This chapter does not apply to landspreading facilities regulated under ch. NR 518 (solid waste), NR 204 (wastewater), or ATCP 40 (fertilizer waste).

**Note:** Responsible parties may also be subject to local requirements governing contaminated materials management.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; am. (1) (a) 1., (b) 1., Register, February, 1996, No. 482, eff. 3-1-96; corrections in (1) (a) 1. and (b) 1. made under s. 13.93 (2m) (b) 7., Stats., Register, March, 2001, No. 543; corrections in (1) (a) 2. and (b) 2. made under s. 13.93 (2m) (b) 7., Stats., Register September 2007 No. 621; **CR 12-023: am. (1) (a) 1., 2., (b) 1., 2. Register October 2013 No. 694, eff. 11-1-13.**

**NR 718.03 Definitions.** In this chapter:

(1) "Berm" means a ridge of clean, compacted cohesive soil or impervious material constructed to withstand and control the movement of liquids.

(2) "Bioremediation" means degradation of contaminants by microbes.

(3) "Boundaries of a landspreading facility" means the outer edges of the area on which contaminated soil has been spread at a landspreading facility.

(4) "Commercial treatment unit or facility" means a unit or facility that is operated for a profit by entities that are paid for providing the service. The term does not apply to a unit or facility operated by several responsible parties who pay a share of jointly incurred expenses, including consultant fees.

**Note:** The use of leased vehicles or other equipment does not make a treatment unit commercial.

(5) "Contaminated soil" means soil which contains one or more hazardous substances or environmental pollution and which is not a hazardous waste as defined in s. NR 660.10 (52) or 42 USC 6901 to 6991, as amended.

(6) "Floodplain" has the meaning specified in s. NR 116.03 (16).

**Note:** Section NR 116.03 (16) defines "floodplain" to mean "that land which has been or may be covered by floodwaters during the regional flood. The floodplain includes the floodway, floodfringe, shallow depth flooding, flood storage and coastal floodplain areas."

(7) "Landspreading facility" has the meaning specified in s. NR 500.03 (121).

**Note:** Section NR 500.03 (121) defines "landspreading facility" to mean "a land disposal facility where solid waste is discharged, deposited, placed or injected in thin layers onto the land surface of the facility, or is incorporated into the top several feet of the surface soil, for agricultural, silvicultural or waste disposal purposes".

(8) "Leachate" has the meaning specified in s. NR 500.03 (123).

**Note:** Section NR 500.03 (123) defines "leachate" to mean "water or other liquid that has percolated through or contacted solid waste or gases generated by solid waste."

(9) "Light petroleum products" means gasoline, diesel fuel, no. 1 or no. 2 fuel oil, kerosene, aviation gasoline, jet fuel, or a mixture of 2 or more of these materials.

(10) "Monitoring" means a systematic method of collecting and reporting chemical and other data from contaminated media.

(11) "Single-application landspreading" means landspreading where contaminated soil from only one remedial action site is

all the contaminated soil that is ever applied onto an area of a property.

(12) "Storage" means placement of solid waste on a temporary basis in a manner that does not constitute disposal of solid waste.

(13) "Volatilization" means removal of contaminants from soil or other media by evaporation.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; renun. (3) to (9) to be (4), (5), (6), (8), (10), (12) and (13), cr. (3), (7), (9) and (11), Register, December, 1998, No. 516, eff. 1-1-99; correction in (5) made under s. 13.93 (2m) (b) 7., Stats., Register September 2007 No. 621; **CR 12-023; am. (5), (8) Register October 2013 No. 694, eff. 11-1-13.**

#### NR 718.05 Storage of excavated contaminated soil.

(1) **EXEMPTION FROM SOLID WASTE PROGRAM REQUIREMENTS.** Sites or facilities where less than 2,500 cubic yards of excavated contaminated soil are stored by responsible parties for a period not to exceed 6 months, in accordance with all of the requirements of this section, are exempt from the solid waste program requirements for the storage of contaminated soil in ch. 289, Stats., and chs. NR 500 to 538.

**Note:** This section does not apply to sites or facilities where more than 2,500 cubic yards of excavated contaminated soil are stored or where storage of contaminated soil exceeds 6 months. This section also does not apply to the storage by responsible parties of excavated contaminated soil at sites or facilities that are licensed solid waste storage facilities.

(2) **GENERAL STORAGE REQUIREMENTS.** Except as provided in sub. (3) or (4), the requirements in this subsection apply to the storage by responsible parties of excavated contaminated soil at sites or facilities that are not licensed solid waste storage facilities.

(a) *Location standards.* Responsible parties may store contaminated soil at a site or facility in accordance with the requirements of this section, except if the storage area will be located in one of the areas specified in subds. 1. through 4., or if an exemption is issued by the department pursuant to par. (b).

1. Within a floodplain.
2. Within 100 feet of any wetland or critical habitat area.
3. Within 300 feet of any navigable river, stream, lake, pond or flowage.
4. Within 100 feet of any water supply well for on-site storage or within 300 feet of any water supply well for off-site storage.

(b) *Exemptions from location standards.* Responsible parties may store contaminated soil in a location listed in par. (a) if the department has granted a written exemption from that location standard, after considering all of the following:

1. Waste characteristics and quantities.
2. The geology and hydrogeology of the area, including information from well logs and well construction records for nearby wells.
3. The unavailability of other environmentally suitable alternatives.
4. Compliance with other state and federal regulations.
5. The threat to public health, safety, or welfare or the environment.

(c) *Impervious base.* Responsible parties shall place contaminated soil on base material impervious to the contaminant and to water, such as concrete, asphalt, plastic sheeting or an impervious construction fabric.

(d) *Cover and anchoring.* Responsible parties shall ensure that all contaminated soil in a storage area is sloped and graded to eliminate depressions in the surface and is covered. The cover shall be in place at all times when the soil is not being transferred. The cover shall be constructed and maintained in accordance with all of the following requirements:

1. The cover shall be constructed of an impervious material, such as plastic sheeting, impervious construction fabric, or another flexible impervious material. The cover shall be formulated to resist degradation by ultraviolet light.

2. The cover material shall be anchored in place, by means such as weights, ropes, cables, cords, chains or stakes to prevent the contaminated soil from being exposed.

(e) *Surface water control.* Responsible parties shall construct a storage area to prevent surface water contact with the soil, including the construction of berms if necessary. Any water which has been in contact with contaminated soil shall be contained and may be replaced in the storage pile, or shall be collected and treated as leachate as required by chs. NR 500 to 538.

(f) *Signs.* Responsible parties shall post signs as required by s. NR 714.07 (4).

(g) *Inspections.* Unless otherwise directed by the department, responsible parties shall ensure that contaminated soil storage piles are inspected at least once every 30 days, and shall immediately repair or replace any base, cover, anchoring and berm materials that do not meet the requirements of this subsection. Responsible parties shall also ensure that a written log is maintained which includes the inspection dates, name of the inspector, the condition of the storage pile at the time of the inspection and any repairs that were made.

(h) *Notification that soil is being transported to another property.* Responsible parties shall notify the department in writing if excavated contaminated soil is transported for storage to a property other than that from which it was excavated. Notification shall be made within 3 days after the first day that contaminated soil is transported to another property and shall include all of the following:

1. The name, address and telephone number of the person who owns the site or facility from which the soil originated.
2. The volume of soil being transported.
3. The hazardous substances and environmental pollution present in the soil.
4. The containment measures utilized to attain compliance with pars. (c), (d) and (e).
5. The address and location by quarter-quarter section, township, range and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude of the property from which the soil was excavated.
6. The name, address and telephone number of the person who owns the property where the soil is stored.
7. The address and location by quarter-quarter section, township, range and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude of the property where the soil is stored.

(i) *Notification of storage for 90 days or more.* Responsible parties shall notify the department in writing if contaminated soil is stored for 90 days or more either on-site or off-site, within 3 business days after the ninetieth day. Notification shall include all of the following:

1. The name, address and telephone number of responsible parties.
2. The volume of soil being stored.
3. The hazardous substances or environmental pollution present in the soil.
4. The containment measures utilized to attain compliance with pars. (c), (d) and (e).
5. The address and location by quarter-quarter section, township, range and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude of the property where the soil is stored.
6. A brief proposal for treatment and final placement of the soil.

(3) **REQUIREMENTS FOR TEMPORARY STOCKPILES.** Sites or facilities where responsible parties temporarily store up to 2,500 cubic yards of excavated contaminated soil for 15 days or less, for the purpose of loading the soil into transfer vehicles or treatment units, are exempt from regulation under ch. 289, Stats., and chs.

NR 500 to 538 and are not subject to the general storage requirements in sub. (2) if the soil is stored in accordance with all of the following requirements:

(a) The entire soil pile shall be located within 500 feet of the excavation from which the contaminated soil was removed, or within 1,000 feet of the excavation from which the contaminated soil was removed if the soil is stored on the same property from which it was excavated.

(b) The same contaminated soil shall not be stored for more than 15 days.

(c) All contaminated soil shall be placed on base material impervious to contaminants in the soil and to water, such as concrete, asphalt, plastic sheeting or impervious construction fabrics.

(d) Surface water contact with the contaminated soil shall be prevented, including the construction of berms if necessary, to control surface water movement.

(e) The contaminated soil shall be covered when it is not being moved, with a cover material sufficient to prevent infiltration of precipitation and to inhibit volatilization of soil contaminants.

**(4) REQUIREMENTS FOR CONTAINERIZED STORAGE.** Sites or facilities where responsible parties store up to 2,500 cubic yards of excavated contaminated soil for 6 months or less in containers or in buildings are exempt from regulation under ch. 289, Stats., and chs. NR 500 to 538, and are not subject to the general storage requirements in sub. (2), if the contaminated soil is stored in accordance with all of the following requirements:

(a) Containers and buildings shall be designed, constructed and maintained to prevent leakage, infiltration of precipitation and volatilization of soil contaminants to the ambient atmosphere.

(b) Containers shall be labeled and buildings shall have a sign posted in accordance with the requirements of s. NR 714.07 (4).

(c) Contaminated soil may not be stored in containers or buildings for more than 6 months, without the prior written approval of the department.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; corrections in (1), (2) (e), (3) (intro.) and (4) (intro.) made under s. 13.92 (4) (b) 7, Stats., Register February 2010 No. 650; **CR 12-023: am.** (2) (f), (h) 5., 7., (i) 5., (4) (b) **Register October 2013 No. 694, eff. 11-1-13.**

**NR 718.07 Transportation of excavated contaminated soil. (1)** Except where sub. (2) is applicable, a solid waste collection and transportation service operating license is required under s. NR 502.06 whenever excavated contaminated soils are transported.

**(2)** Responsible parties may transport excavated contaminated soil in vehicles that they own without a solid waste collection and transportation service operating license regardless of the number and size of loads, if the excavated contaminated soil is hauled to a site or facility in compliance with the requirements of this chapter or to a licensed solid waste storage, treatment or disposal facility. Responsible parties shall cover contaminated soil, as necessary, to prevent the loss of any material during transport.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94.

**NR 718.09 Treatment of excavated contaminated soil. (1) GENERAL.** If excavated contaminated soil is treated at a non-commercial treatment unit or facility and the treatment unit or facility is operated by the responsible parties in compliance with the requirements of this chapter, that site or facility is exempt from solid waste program requirements for the treatment of the contaminated soil in ch. 289, Stats., and chs. NR 500 to 538, except where solid waste program requirements are specifically referenced in this section. If contaminated soil is incorporated into hot-mix asphalt in accordance with sub. (5), the asphalt plant is exempt from solid waste program requirements for treatment of contaminated soil found in ch. 289, Stats., and chs. NR 500 to 538, except where solid waste program requirements are specifically referenced in this section. If excavated soil contaminated solely with light petroleum products or light petroleum products in com-

bination with agricultural chemicals regulated by the department of agriculture trade and consumer protection under s. 94.73, Stats., is treated by the responsible parties at a single-application landspreading facility in compliance with sub. (8), that landspreading facility is exempt from solid waste program requirements for the treatment of the contaminated soil in ch. 289, Stats., and chs. NR 500 to 538, except where solid waste program requirements are specifically referenced in this section. Commercial treatment units or facilities, hot-mix asphalt plants where contaminated soil is treated by means other than incorporation into the asphalt mix, and thermal treatment units or facilities are required to be licensed under ch. 289, Stats., and chs. NR 500 to 538, and are not exempt under this section.

**Note:** Treatment of contaminated soil that has not been excavated is not regulated as solid waste treatment under ch. 289, Stats., and chs. NR 500 to 538. Design, operation and maintenance requirements for the treatment of unexcavated contaminated soil are established in ch. NR 724.

**(2) LOCATION STANDARDS.** (a) Unless approved under chs. NR 400 to 499, chs. NR 500 to 538 where applicable, or par. (b), responsible parties may not treat excavated contaminated soil in any of the following locations:

1. Within a floodplain.
2. Within 100 feet of any wetland or critical habitat area.
3. Within 300 feet of any navigable river, stream, lake, pond or flowage.
4. Within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well.

(b) Responsible parties may treat contaminated soil in a location listed in par. (a) if the department has granted a written exemption from that location standard, after considering all of the following:

1. Waste characteristics and quantities.
2. The geology and hydrogeology of the area, including information from well logs and well construction records for nearby wells.
3. The unavailability of other environmentally suitable alternatives.
4. Compliance with other state and federal regulations.
5. The threat to public health, safety, or welfare or the environment.

**(3) NON-COMMERCIAL TREATMENT OF SOIL FROM MORE THAN ONE SITE.** Non-commercial treatment units or facilities operated by responsible parties, where less than 2,500 cubic yards of excavated contaminated soil from 5 or fewer contamination sites are treated, are exempt from solid waste program requirements for the treatment of contaminated soil in ch. 289, Stats., and chs. NR 500 to 538, if the treatment is conducted in compliance with the requirements of this section. Excavated contaminated soil from more than 5 properties may not be treated at the same site or facility unless the treatment site or facility is a licensed solid waste treatment facility. Responsible parties may not mix excavated contaminated soil from one property with soil from another property unless the same party owns all of the mixed soil or an approval has been granted under ch. NR 502. Contaminated soil which is stored prior to treatment shall be stored in compliance with the provisions of s. NR 718.05.

**(4) NOTIFICATION.** (a) Responsible parties shall notify the department in writing within 30 days after any of the following:

1. Start up of any type of treatment of excavated contaminated soil that is subject to the requirements of sub. (7), (8) or (9).
2. Shutdown of any type of treatment of excavated contaminated soil that is subject to the requirements of sub. (7), (8) or (9).
3. Substantial change in operations of any type of treatment of excavated contaminated soil that is subject to the requirements of sub. (7), (8) or (9).
4. Completion of any type of treatment of excavated contaminated soil that is subject to the requirements of sub. (7), (8) or (9).

(b) Notification shall include all of the following:



1. The name, address and telephone number of all responsible parties.
2. All locations of sites from which contaminated soil was excavated by address and location by quarter-quarter section, township, range and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude.
3. The volume of soil being treated.
4. The hazardous substances or environmental pollution in the soil.
5. The address and location by quarter-quarter section, township, range and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude of the treatment site.
6. The name, address and telephone numbers of all consultants and contractors involved in response actions at the sites or facilities.
7. A brief description of the treatment system.
8. The reasons for any unscheduled shutdowns or changes in operation.
9. A brief proposal for the disposal of the contaminated soils after treatment.

**(5) TREATMENT OF EXCAVATED CONTAMINATED SOIL AT HOT-MIX ASPHALT OR STRUCTURAL CONCRETE PLANTS.** (a) Responsible parties may not transport or hire another entity to transport excavated contaminated soil to a hot-mix asphalt plant which incorporates contaminated soil into the asphalt mix unless the hot-mix asphalt plant has a current operating air permit under chs. NR 400 to 499 and is in compliance with chs. NR 400 to 499. Where the operator of a hot-mix asphalt plant who is in compliance with chs. NR 400 to 499 becomes a responsible party as a result of a hazardous substance discharge, that responsible party may remediate the resultant contaminated soil in accordance with this chapter by placing the soil directly into hot-mix asphalt. When a hazardous substance discharge occurs that a hot-mix plant operator is responsible for, the department shall be notified immediately of the discharge to the environment and of the response action taken by the asphalt plant operator.

(b) If excavated contaminated soil is incorporated into asphalt at a hot-mix asphalt plant operated in compliance with the requirements of this chapter, that site or facility is exempt from solid waste program requirements for the treatment of the contaminated soil in ch. 289, Stats., and chs. NR 500 to 538, except where solid waste program requirements are specifically referenced in this section.

(c) Storage of excavated contaminated soil at hot-mix asphalt plants which incorporate contaminated soil into the asphalt mix shall be in compliance with all of the following:

1. Storage shall comply with the requirements of s. NR 718.05 (2) (a), (b), (e), (f) and (g).
2. Storage shall be in an area constructed of an asphalt base and asphalt berms, or other materials approved by the department.
3. Up to 5,000 cubic yards of soil may be stored at one time.
4. Storage may take place for up to 9 months per year.
5. Plant operators shall take steps to control windblown dust, and to control the infiltration of precipitation, at contaminated soil storage areas.

(d) Responsible parties may not transport or hire another entity to transport excavated contaminated soil to a hot-mix asphalt plant for treatment other than incorporation into the asphalt mix unless the hot-mix asphalt plant has a current operating air permit under chs. NR 400 to 499, is in compliance with chs. NR 400 to 499 and has an approval for solid waste processing under ch. 289, Stats., and chs. NR 500 to 538. Hot-mix asphalt plants which do not incorporate contaminated soil into the asphalt mix and struc-

tural concrete plants which do not incorporate contaminated soil into concrete shall store excavated contaminated soil in compliance with ch. NR 502.

(e) Responsible parties may not transport or hire another entity to transport excavated contaminated soil to a structural concrete batch plant that does not have all required operating permits and approvals for incorporation of contaminated soils into the concrete mix.

**Note:** Placement of asphalt pavement which contains contaminated soil incorporated into asphalt at a hot-mix asphalt plant operated in compliance with the requirements of this chapter is not regulated as solid waste disposal.

**(6) THERMAL TREATMENT OF EXCAVATED CONTAMINATED SOIL.**

(a) Responsible parties may not transport or hire another entity to transport excavated contaminated soil to a thermal treatment unit or facility unless that thermal treatment unit or facility has all required operating permits or licenses, including a current operating air permit under chs. NR 400 to 499, is in compliance with chs. NR 400 to 499, and has a current license or other approval under s. NR 502.08. Operators of soil treatment units shall take steps satisfactory to the department to minimize noise and dust, such as wetting treated soils and the work area to control dust.

(b) Storage of excavated contaminated soil at thermal treatment units or facilities is exempt from the storage requirements in ch. 289, Stats., and chs. NR 500 to 538 if it is in compliance with the following:

1. Storage shall comply with the requirements of s. NR 718.05 (2) (a) to (c) and (e) to (g).
2. Up to 5,000 cubic yards of soil may be stored at one time.
3. Storage may take place for up to 9 months per year.
4. Operators of soil treatment units shall take steps satisfactory to the department to control the infiltration of precipitation at contaminated soil storage areas.

**(7) BIOREMEDIATION AND TREATMENT BY VOLATILIZATION OF EXCAVATED CONTAMINATED SOIL.** Except as provided in sub. (8), all of the following requirements apply to the treatment of excavated contaminated soil by bioremediation, volatilization or both:

(a) Responsible parties who treat excavated contaminated soil by bioremediation or volatilization, or both, shall maintain the excavated contaminated soil in compliance with the requirements of s. NR 718.05 (2) (c), (e), (f) and (g), unless other methods are approved by the department.

(b) All excavated contaminated soil shall be covered, as necessary, to prevent volatilization of soil contaminants in excess of limits in chs. NR 400 to 499. If a cover is required by chs. NR 400 to 499, the cover material and anchoring system shall meet the requirements of s. NR 718.05 (2) (d), unless other methods are approved by the department.

(c) All treatment of excavated contaminated soil by bioremediation or volatilization shall be designed, operated and maintained in accordance with the requirements of ch. NR 724.

**(8) SINGLE-APPLICATION LANDSPREADING OF EXCAVATED CONTAMINATED SOIL.**

(a) *General.* Responsible parties, or their agents or contractors, may conduct single-application landspreading of soil contaminated solely with light petroleum products or light petroleum products in combination with agricultural chemicals regulated by the department of agriculture, trade and consumer protection under s. 94.73, Stats., provided that the requirements of pars. (b), (c), (d) and (e) are met. Landspreading of contaminated soil which contains chemicals regulated by the department of agriculture, trade and consumer protection under s. 94.73, Stats., shall also be conducted in accordance with a plan that has received prior written approval from the department of agriculture, trade and consumer protection.

(b) *Waste characterization.* 1. Waste shall be characterized prior to submitting the operation plan under par. (d). Analytical results from a site investigation conducted under ch. NR 716 may be used to characterize the waste or to supplement the waste char-

acterization. Samples shall be collected and analyzed in accordance with the following requirements:

a. For the first 600 cubic yards of contaminated soil to be landspread at each landspreading facility, one soil sample shall be collected for each 100 cubic yards of contaminated soil to be landspread. For volumes of contaminated soil that exceed 600 cubic yards, a minimum of one additional sample per 300 cubic yards shall be collected for analysis. At a minimum, 2 samples shall be collected from the soil to be landspread.

b. Samples shall be analyzed for all contaminants whose presence is suspected considering the site investigation scoping items listed under s. NR 716.07.

c. At a minimum, the testing listed in Table 1 shall be performed on the contaminated soil based on the contaminant type.

**Table 1**

**Minimum Testing Requirements For Landspreading Soil Contaminated With Light Petroleum Products**

Petroleum Contaminant Type	Laboratory Analysis
Gasoline; grades 80, 100, 100LL & aviation gasoline	PVOC & Pb
Diesel; jet fuel; kerosene; & nos. 1 & 2 fuel oil	PVOC & PAH

d. Soil samples shall be collected and analyzed in accordance with the provisions in s. NR 716.13 (11) and (12).

2. Soil to be landspread shall meet the following requirements:

a. Landspreading of soil containing polynuclear aromatic hydrocarbons (PAHs) shall be approved in writing by the department in accordance with the procedures in par. (d) 4.

b. The metal contaminant concentrations in the excavated contaminated soil to be landspread may not exceed the residual concentration levels established in accordance with ch. NR 720.

c. The excavated contaminated soil to be landspread may not be a hazardous waste as defined in s. NR 660.10 (52).

(c) *Facility approvals.* 1. The department may approve a facility for single-application landspreading under this section if the applicant submits a complete application and the facility meets the location standards under subd. 3. All applications for facility approvals shall be submitted on forms supplied by the department. The applicant shall send a copy of the application to the clerks of the county and the city, village or town where the facility is located at the same time that it is submitted to the department. Before an application for approval of a single-application landspreading facility is considered complete, the following information shall be submitted:

a. The facility location, including legal description and copies of any county soil survey maps, plat maps, USGS topographic maps or other maps used to demonstrate that the criteria in this paragraph are met. The area proposed for landspreading shall be delineated on appropriate maps and the total area proposed for landspreading shall be determined in square feet or acres.

b. The names, addresses and telephone numbers of the person who will operate the landspreading facility and the site owner.

c. A description of the current land use of the facility and surrounding properties.

d. The slope, depth to seasonal high water table and bedrock, and soil characteristics including soil type, and the mean permeability of the uppermost 5 feet of soil. Information summarized from county soil surveys published by the United States department of agriculture maps and similar sources may be used to obtain this information where appropriate. Information obtained from soil borings or test pits may be used to determine site-specific characteristics. The use of county soil surveys is not appro-

priate to determine separation from groundwater or bedrock for sites where a 10-foot separation distance is required.

e. Copies of any local approvals required in order to landspread or an affirmation that no local approvals are required.

f. Documentation that the site meets the location standards in subd. 3.

**Note:** Copies of application forms for facility approvals may be obtained from any regional office of the department or by writing to the Department of Natural Resources, Bureau for Remediation and Redevelopment, PO Box 7921, Madison, Wisconsin, 53707-7921.

2. a. If a facility approval application is not complete, the department shall notify the applicant within 15 business days of receipt that it is not complete and identify the information necessary to complete the application.

b. The department shall approve or disapprove of an application within 30 business days of receipt of a complete application.

c. Approval of a facility shall be effective for 2 years after the date of approval, unless circumstances affecting the facility change so that the facility no longer meets the location standards in subd. 3. An approval is no longer effective at any time that circumstances change in a manner that would cause the facility to not meet any of the standards in subd. 3. The department may extend a facility approval up to an additional 2 years from the date of the original approval if the applicant submits a request for an extension and that request certifies that circumstances have not changed in a manner that would cause the facility to not meet any of the standards in subd. 3.

3. No person may establish, construct, operate, maintain or permit use of property as a single-application landspreading facility in the following areas:

a. Within a floodplain.

b. Within 100 feet of a wetland.

c. Within 100 feet of a critical habitat area.

d. Within 300 feet of any navigable water body.

e. Within 1,000 feet of a public water supply well or its delineated wellhead protection area, unless a written waiver by the department is obtained. The department shall use the provisions for alternative requirements under s. NR 811.03 in acting on requests for waivers.

f. Within 250 feet of a private water supply well, unless a written waiver by the department is obtained. The department shall use the provisions for obtaining a variance under s. NR 812.43 in acting on requests for waivers.

g. Within 500 feet of any residence, unless written consent is obtained from the resident.

h. Within 500 feet of buildings housing domestic livestock, unless written consent is obtained from the owner of the livestock.

i. Within 25 feet of any boundary of the property on which the landspreading facility is located if there are no residences within 500 feet of that boundary, unless written consent from the adjoining property owner is obtained.

j. Within 200 feet of any boundary of the property if there is a residence within 500 feet of that boundary, unless written consent is obtained from the resident.

k. On land where the ground surface is located less than 5 feet above the seasonal high groundwater table or bedrock if the mean permeability in the uppermost 5 feet of soil is equal to or less than 6 inches per hour or on land where the ground surface is located less than 10 feet above the seasonal high groundwater table or bedrock if the mean permeability in the uppermost 5 feet of soil is greater than 6 inches per hour. Mean permeability shall be the weighted average determined by summing the products of the permeability of a each layer of soil in the uppermost 5 feet of soil times the thickness of that layer, in feet, and dividing by 5 feet. Where the permeability of a layer of soil is stated as a range, the midpoint of the range shall be used to calculate the mean permeability.

L. On any land where the surface slope exceeds 6%.

(d) *Operation plan.* 1. Except as provided in subd. 4., single-application landspreading of excavated contaminated soil may be conducted at a facility that has been approved under par. (c) without additional department approval if the responsible party, or an agent or contractor, submits an operation plan to the department at least 10 days, but not more than 70 days, prior to the start of the operation, and complies with the operation standards in subd. 3., unless the department issues a written objection. The operation plan for a single-application landspreading facility shall contain the following information:

a. Results of the waste characterization required under par. (b) 1.

b. A certification that the responsible party, their agent or contractor will comply with the operational requirements of subd. 2. and a description of how the requirements will be complied with.

c. A list of the persons notified under this paragraph and clerks notified under par. (c) 1., or the addresses to which the notices were delivered.

2. The responsible party, or an agent or contractor, shall give written notice that landspreading of contaminated soil will occur. This notification shall include the location of the landspreading facility, the name, address and telephone number of a contact person for the landspreading facility, a description of the type of contamination in the soil and the anticipated dates and times that the landspreading will occur. This notification shall occur at least 10 days, but not more than 70 days, prior to commencing operation, and shall be mailed or delivered to the following persons:

a. The clerks of the county and the city, village or town where the facility is located.

b. All owners, tenants and occupants of residences within 1,000 feet of the landspreading facility.

3. Any person operating a single-application landspreading facility shall comply with the following operation standards:

a. Except as proved in subd. 3. b., only one single-application landspreading facility may be operated at any one time on all contiguous property owned by the same entity. A landspreading facility shall be considered in operation from the time that contaminated soil is first placed on the facility until such time that the requirements in par. (e) have been met.

b. Notwithstanding subd. 3. a., where contiguous property owned by the same entity is larger than 40 acres, the number of single-application landspreading facilities allowed to be operating on that property shall be determined by dividing the total number of acres of the property by 40 and rounding up to the nearest whole number.

c. Contaminated soil shall be evenly spread over the landspreading area and incorporated into the native soil by plowing, disking or similar operations within 72 hours of landspreading. Each batch of contaminated soils shall be incorporated within 72 hours from when that batch was first spread. Except for incorporation, all spreading, loading, unloading and storage of petroleum contaminated soils shall cease no later than one hour prior to sunset.

d. The excavated contaminated soil may not be landspread when frozen, landspread on frozen ground or landspread under any other conditions that would make incorporation into the native soils impractical.

e. The spreading thickness of contaminated soil may not exceed 4 inches.

f. Contaminated soil to be landspread may not contain free product.

g. Debris including pieces of plastic, bricks, metal, and wood shall be removed from the contaminated soil prior to landspreading and shall be properly disposed of in accordance with chs. NR 500 to 538.

h. The maximum total organic compound contaminant landspreading rate may not exceed 3000 pounds per acre.

i. The total volatile organic compound contaminants and benzene landspread at the landspreading facility may not exceed the limit in s. NR 419.07 (4) (e).

j. The maximum one time and cumulative application rates of cadmium and other heavy metal shall be in accordance with s. NR 518.07 (1) (d).

k. Contaminated soil to be landspread shall be stored in accordance with s. NR 718.05.

L. The landspreading facility shall be seeded as soon as practicable, but not later than within 7 days after completion of all application of the contaminated soil at the facility if the soil was applied prior to October 15 of any year. If application was completed after October 15, the facility shall be seeded as soon as practicable the following year, but not later than June 30. The department may grant a written waiver of these seeding requirements upon demonstration by the applicant that they are unable to comply with them due to adverse weather conditions.

m. The landspreading facility may not be seeded with a crop intended for human consumption prior to submittal of a treatment verification report which indicates that the contaminants have been reduced to comply with the residual contaminant levels determined in accordance with the provisions of ch. NR 720.

n. Erosion control shall be conducted as necessary.

o. Signs shall be posted at any access points to the facility in accordance with s. NR 714.07 (4). The boundaries of the landspreading facility shall be marked and maintained until facility closure.

4. If polynuclear aromatic hydrocarbons (PAHs) are detected in the waste characterization required under in par. (b) 1., responsible parties, or their agents or contractors, may landspread excavated contaminated soil only if they obtain a written approval of their operation plan from the department. The department shall notify the applicant, within 15 business days after receipt of the operation plan, if the plan is incomplete. The department shall approve of the operation plan if the plan satisfies the requirements of this paragraph and the levels of PAHs in the contaminated soils meet the criteria for residual contaminant levels specific to a site or facility under ch. NR 720. The department shall approve or disapprove of an application for an operation plan approval within 30 business days after receipt of a complete plan.

(e) *Treatment Verification.* 1. 'Sampling.' The responsible party, their agent or contractor or the operator of a single-application landspreading facility shall submit to the department the results of a soil sampling program at the landspreading facility, to verify that all contaminants detected through the waste characterization under par. (b) 1. have been reduced to meet the residual contaminant levels specified in ch. NR 720. Samples shall be obtained from one location per every 100 yards of soil landspread. These sampling locations shall be evenly distributed over the landspreading facility. If less than 100 yards of soil is landspread, samples shall be collected from 2 sampling locations. At each sampling location 2 samples shall be obtained, one from the treatment zone and one obtained from 2 to 3 feet below the ground surface.

2. 'Sample analysis.' The samples shall be analyzed as follows:

a. If 20 or less samples are required under subd. 1., all samples shall be analyzed for all contaminants identified through the waste characterization under par. (b) 1. that exceeded the residual contaminant levels in ch. NR 720.

b. If more than 20 samples are required under subd. 1., the responsible party or agent may use field screening to reduce the number of samples to be analyzed. If the samples are screened in the field to determine relative VOC concentration, only 50% of the samples required to be taken or 20 samples, whichever is



greater, need to be analyzed. The samples that are sent for analysis shall be those that showed the greatest contamination during the field screening, except that at least 25% of the samples sent for analysis shall be those samples obtained from 2 to 3 feet below the ground surface. Samples shall be analyzed for all contaminants identified through the waste characterization under par. (b) that exceeded the residual contaminant levels in ch. NR 720.

3. 'Sampling frequency.' Sampling shall be done within 18 months after landspreading commenced on the facility. If sampling results show that any contaminants still exceed the residual contaminant levels in ch. NR 720, additional sampling shall be done at least annually at all sample locations at which the levels were exceeded. The samples shall be analyzed for the contaminants which exceeded the residual contaminant levels in ch. NR 720 in the previous round of sampling. The department may waive the requirement to sample within the first year upon the request of the responsible party, their agent or contractor, or the operator of the landspreading facility, if it is apparent that the site does not yet meet residual contaminant levels as determined in accordance with the provisions of ch. NR 720 and the sampling will serve no useful purpose.

4. 'Incomplete treatment.' If complete treatment of the contaminants which have been landspread has not been demonstrated to the department within 3 years after the contaminated soil was landspread, the responsible party, their agent or contractor shall submit a plan signed by a professional engineer to the department detailing the actions that they will take to enhance the treatment of the contaminants which still exceed the residual contaminant levels in ch. NR 720. This plan shall be submitted within 60 days after the end of the 3-year period and shall assure that cleanup is completed within 2 years. The department shall approve this plan, extending the landspreading treatment period for up to 2 years, if the plan demonstrates to the department that applicable soil cleanup standards will be met within that period of time. The department may require at any time groundwater monitoring to determine whether or not the landspread contaminants are impacting groundwater. At any time that the facility does not appear to be remediating or if it still does not meet cleanup standards after 5 years of treatment, the department may require that additional measures be taken to remediate the site or require the recording of a deed notice at the register of deeds office in the county where the facility is located that gives notice of the existence of the solid waste landspreading facility in compliance with s. NR 518.10.

5. 'Treatment verification report.' Responsible parties shall submit a treatment verification report to the department within 60 days after successful treatment of the contaminated soil. The report shall contain the results of sampling conducted under this paragraph.

(9) OTHER TYPES OF TREATMENT. Responsible parties shall obtain approval from the department before implementing any type of treatment for excavated contaminated soil other than the types of treatment described in subs. (5) to (8). An application for approval shall include the information required in ch. NR 724 and any other information required by the department.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; am. (1) and (6), r. and recr. (5), Register, March, 1995, No. 471, eff. 4-1-95; am. (1) and (7) (intro.), r. and recr. (8), Register, December, 1998, No. 516, eff. 1-1-99; correction in (8) (b) 2. c. made under s. 13.93 (2m) (b) 7., Stats., Register September 2007 No. 621; corrections in (1), (2) (a) (intro.), (3), (5) (b), (d) and (6) (b) (intro.) made under s. 13.92 (4) (b) 7., Stats., Register February 2010 No. 650; correction in (8) (d) 3. g. made under s. 13.92 (4) (b) 7., Stats., Register June 2013 No. 690; CR 12-023: am. (4) (b) 2., 5., (8) (b) 1. c. Table 1, d., 2. b., c., (c) 2. a., (d) 3. g., i., m., o., 4., (e) (title), 1., 2. a., b., 3. to 5. Register October 2013 No. 694, eff. 11-1-13.

## NR 718.12 Management of contaminated soil.

(1) GENERAL. (a) If responsible parties manage contaminated soil at a site or facility in accordance with the provisions of this section, that site or facility is exempt from the solid waste program requirements in ch. 289, Stats., and chs. NR 500 to 538.

**Note:** Contaminated soil that cannot be managed under s. NR 718.12 may be approved for disposal in a licensed solid waste disposal facility under ch. 289, Stats., and chs. NR 500 to 538.

(b) The response action shall be conducted in accordance with all of the applicable requirements in chs. NR 700 to 754.

(c) Responsible parties may not place or replace excavated contaminated soil in the following areas unless the department has granted a written exemption to these location standards, after considering all of the factors listed in par. (d):

1. Within a floodplain.
2. Within 100 feet of any wetland or critical habitat area.
3. Within 300 feet of any navigable river, stream, lake, pond, or flowage.
4. Within 100 feet of any on-site water supply well or 300 feet of any off-site water supply well.
5. Within 3 feet of the high groundwater level.
6. At a depth greater than the depth of the original excavation from which the contaminated soil was removed.
7. Where the contaminated soil poses a threat to public health, safety, or welfare or the environment.

(d) Responsible parties may manage contaminated soil in a location listed in par. (c) if the department has granted a written exemption from that location standard, after considering all of the following:

1. Waste characteristics and quantities.
2. The geology and hydrogeology of the area, including information from well logs and well construction records for nearby wells.
3. The unavailability of other environmentally suitable alternatives.
4. Compliance with other state and federal regulations.
5. The threat to public health, safety, or welfare or the environment.

(e) Unless otherwise approved by the department, responsible parties shall sample and analyze all contaminated soil in accordance with all the following requirements:

1. For each site or facility, one sample shall be collected for analysis for each 100 cubic yards of contaminated soil, for the first 600 yards with a minimum of 2 samples being collected. For volumes of contaminated soil that exceed 600 cubic yards, one sample for each additional 300 cubic yards shall be collected for analysis.

2. Samples shall be analyzed for all contaminants that were detected during a site investigation. In addition, available information shall be evaluated to determine what contaminants may have been discharged at the site or facility and samples shall be analyzed for those contaminants that are expected to be present based on past land use.

3. All soil samples shall be collected from areas most likely to contain residual soil contamination.

4. Responsible parties shall report all analytical results to the department in writing within 10 business days after receiving the sampling results.

**Note:** For those situations where an immediate action is being taken in accordance with s. NR 708.05 or where contamination is discovered as part of utility or other construction related work, the contaminated soil can generally be managed in accordance with the criteria set forth in s. NR 718.12 (1). The department should be contacted upon discovery of contaminated soil during construction activities for direction on how to proceed.

(2) ADDITIONAL REQUIREMENTS FOR CONTAMINATED SOIL MANAGED AS PART OF AN INTERIM ACTION OR REMEDIAL ACTION. (a) Responsible parties shall provide the department with written notice at least 7 days prior to initiating soil excavation activities.

(b) Prior to managing contaminated soil under s. NR 718.12, responsible parties shall submit a soil management plan to the department for review and approval. Unless otherwise approved,

at a minimum soil management plans shall contain all the following information:

1. The name, address, e-mail address, and telephone number of the responsible party.
2. The volume of contaminated soil to be managed.
3. The address and location, by quarter-quarter section, township, range, and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude of the site or facility where the contaminated soil originated.
4. The name, address, and phone number of any consultants or contractors who are involved with the project.
5. A proposed schedule for implementation of the soil management plan.
6. The result of all analyses performed on the contaminated soil.
7. A description of how the contaminated soil will be managed.
8. Sufficient information to justify that the placement or replacement of contaminated soils will meet the requirements of s. NR 726.13 (1) (b) 1. to 5.

(c) If management of the contaminated soil is proposed to take place at a location other than where it was excavated, the responsible party shall provide the following additional information:

1. The name, address, and telephone number of the owner or owners of the property.
2. The address and location, by quarter-quarter section, township, range, and county, geographic position determined in accordance with the requirements of s. NR 716.15 (5) (d), and the latitude and longitude of the site or facility where the contaminated soil is to be placed.
3. The geology and hydrogeology of the site or facility, including information from any previous remedial investigations. This also includes information from well logs or well construction records for nearby wells.

**Note:** If another report is being prepared to address the necessary response action, such as a remedial action plan, the soil management plan can be included as part of that report.

(d) If implementation of the soil management plan will result in the need for a continuing obligation on the property as defined by s. NR 725.05 (2), the responsible party shall provide written notification to anyone meeting the criteria in s. NR 725.05 (1) at least 30 days prior to submitting the soil management plan to the department for review. Unless otherwise approved by the department, notification letters shall meet the requirements contained in s. NR 725.07.

(e) For sites or facilities where the department approves a soil management plan or other remedial action that includes a continuing obligation which meets any of the criteria in s. NR 725.05 (2), the department may require that the site or facility, including all properties and rights-of-way within the contaminated site boundaries, be included on the department database. Unless otherwise approved by the department, all applicable database documentation requirements set forth in s. NR 726.11 shall be met. The fees required by ch. NR 749 shall be submitted to the department.

**Note:** Under s. 292.12 (3) (b), Stats., the department has authority to charge a fee for placement on a department database.

**Note:** If the continuing obligation related to contaminated soil is being imposed as part of another department action for the same site (i.e. closure) separate fees for placement on the database will generally not be required.

**History:** CR 12-023; cr. Register October 2013 No. 694, eff. 11-1-13.

**NR 718.15 Management of other solid wastes.** If solid waste which contains waste other than contaminated soil is replaced at the site or facility from which it was excavated, as part of a response action conducted in compliance with all of the applicable requirements in chs. NR 700 to 754, and the department has granted prior written approval for the action, the replacement of that solid waste on the site or facility from which it was excavated is exempt from the requirements of ch. 289, Stats., and chs. NR 500 to 538.

**Note:** Section NR 506.085 prohibits the following activities at solid waste disposal facilities which are no longer in operation unless specifically approved by the department in writing: 1) use of the waste disposal area for agricultural purposes, 2) establishment or construction of any buildings over the waste disposal area, and 3) excavation of the final cover or any waste materials. The department has developed detailed guidance to address the issue associated with building on historic fill sites and licensed landfills. This information can be found at: <http://dnr.wi.gov/topic/Landfills/development.html>.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; correction made under s. 13.92 (4) (b) 7., Stats., Register February 2010 No. 650; CR 12-023; am. Register October 2013 No. 694, eff. 11-1-13.

**NR 718.17 Exemption for emergency immediate actions.** For a period of 72 hours after an emergency immediate response is initiated in accordance with the requirements of ch. NR 708, the storage and transportation of contaminated soil that was excavated as part of the emergency immediate action are exempt from the requirements of ss. NR 718.05 and 718.07, and are exempt from meeting the solid waste storage and transportation requirements in ch. 289, Stats., and chs. NR 500 to 538, provided that the department is immediately notified of the emergency immediate action being conducted in accordance with the requirements of ch. NR 708.

**History:** Cr. Register, April, 1994, No. 460, eff. 5-1-94; correction made under s. 13.92 (4) (b) 7., Stats., Register February 2010 No. 650.