

within 7 days of the date of a confirmation that the facility may be affecting groundwater quality.

(9) Within 15 days after the notification under sub. (8), the owner or operator shall develop and submit to the department a specific plan prepared under the direction of and signed by a qualified hydrogeologist, for a groundwater quality assessment program at the facility, based on determining: whether hazardous waste or hazardous waste constituents have entered the groundwater; the rate and extent of migration of hazardous waste or hazardous waste constituents in the groundwater; and the concentrations of hazardous waste or hazardous waste constituents in the groundwater.

(10) The plan to be submitted under sub. (9) shall specify the number, location and depth of wells; the number and analysis frequency of water quality parameters for those hazardous wastes or hazardous waste constituents in the facility; evaluation procedures and groundwater quality, sampling and analytical methods to be used for determining the source or cause of contamination, including use of any previously gathered groundwater quality information; facility design and construction reports, operating procedures and facility history; and a schedule of implementation.

(11) The owner or operator shall implement the groundwater quality assessment plan which satisfies the requirements of sub. (10) and department concerns and, at a minimum, determine: the source or cause of the contamination; the rate and extent of migration of the hazardous waste and hazardous waste constituents in the groundwater; the concentrations of the hazardous waste or hazardous waste constituents in the groundwater; and short and long-term potential impacts to drinking water supplies and the environment, and proposed conceptual solutions and action to bring under control and correct the environmental damage.

(12) The owner or operator shall make the determination under sub. (11) in accordance with the time schedule approved by the department; and, within 15 days after that determination, submit to the department a written report containing an assessment of the groundwater quality, cause and effect of contamination and conceptual solutions.

(13) If the owner or operator determines, based on the results of the determination under sub. (11), that no hazardous waste or hazardous waste constituents from the facility have entered the groundwater, then the owner may reinstate the indicator evaluation program described in subs. (4) and (5) (b) to (12). If the owner or operator reinstates the indicator evaluation program, the department shall be notified in the report submitted under sub. (12).

(14) If the owner or operator determines, based on the determination under sub. (11) that hazardous waste or hazardous waste constituents from the facility have entered the groundwater, then the owner or operator shall continue to make the determinations required under sub. (11) on a quarterly basis until the end of the long-term care period for the facility, or until the groundwater quality problems at the site have been corrected as provided for in the final plans; shall submit a final plan for solutions and corrective action to control and correct the environmental damage within 180 days after the department's review of submittals under sub. (12) and shall implement the final plans for solutions and corrective actions and other emergency procedures including department

review comments within 45 days after the department's review of the final plans.

(15) Any groundwater quality assessment to satisfy the requirements of sub. (11) shall be completed and reported in accordance with sub. (12).

(16) At least annually the owner or operator shall evaluate the data on groundwater surface elevations obtained under s. NR 635.12 (7) to determine whether the requirements under s. NR 635.12 (1) and (5) for locating the monitoring system continue to be satisfied. If the evaluation shows that s. NR 635.12 (1) and (5) are no longer satisfied, the owner or operator shall immediately notify the department and submit for department approval a plan to bring the monitoring system into compliance with this requirement.

(17) The owner or operator of the site or facility shall comply with the following reporting and record keeping requirements:

(a) The owner or operator shall report to the department the results of the sampling from each groundwater monitoring well required under s. NR 635.12 (1) quarterly.

(b) The owner or operator shall annually report to the department the results of the statistical evaluation required under sub. (6) and groundwater surface elevation required under sub. (16) and a description of the response, where applicable.

(c) The owner or operator implementing a groundwater quality assessment plan under sub. (11), shall annually report to the department the results of the groundwater quality assessment program which includes, but is not limited to, the rate of contaminant migration during the reporting period.

(d) An owner or operator of a site or facility shall retain, until the end of the long-term care period, all records of monitoring and analytical activities and data, including all original strip chart recordings and instrumentation, calibration and maintenance records. The owner or operator shall inform the department prior to discarding any groundwater information.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91.

NR 635.17 Corrective action for solid waste management units. (1) The owner or operator of a facility seeking a license for the treatment, storage or disposal of hazardous waste shall institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or hazardous waste constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in a unit. Corrective action under this section shall, at a minimum, restore contaminated groundwater in compliance with the requirements of ch. NR 140.

(2) Corrective action shall be specified in the license. The license shall contain schedules of compliance for corrective action where corrective action cannot be completed prior to issuance of the license and assurances of financial responsibility for completing corrective action.

(3) The owner or operator shall implement corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the

satisfaction of the department that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake actions. The owner or operator is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied. On-site measures to address releases shall be determined by the department on a case-by-case basis. The owner or operator shall establish proof of financial responsibility for corrective action in accordance with a department issued order or plan approval and the requirements of ch. NR 685 and s. 144.443, Stats.

History: Cr. Register, February, 1991, No. 422, eff. 3-1-91; am. (1), Register, April, 1994, No. 460, eff. 5-1-94.

APPENDIX I¹

GROUNDWATER MONITORING LIST

Common name ²	CAS RN ³	Chemical abstracts service index name ⁴	Suggested methods ⁵
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100 8270
Acenaphthylene	208-96-8	Acenaphthylene	8100 8270
Acetone	67-64-1	2-Propanone	8240
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015
2-Acetylamino- fluorene; 2-AAF	53-96-3	Acetamide, N-9H- fluoren-2-yl-	8270
Acrolein	107-02-8	2-Propenal	8030 8240
Acrylonitrile	107-13-1	2-Propenenitrile	8030 8240
Aldrin	309-00-2	1,4:5,8-Dimethano- naphthalene, 1,2,3,4,10, 10-hexachloro- 1,4,4a,5, 8,8a-hexahydro- (1a,4a, 4ab,5a,8a,8ab)-	8080 8270
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010 8240
4-Aminobiphenyl	92-67-1	[1,1'-Biphenyl]-4-amine	8270
Aniline	62-53-3	Benzenamine	8270
Anthracene	120-12-7	Anthracene	8100 8270
Antimony	(Total)	Antimony	6010 7040 7041
Aramite	140-57-8	Sulfurous acid, 2-chloroethyl 2-[4-(1,1- dimethylethyl) phenoxy]- 1-methylethyl ester	8270
Arsenic	(Total)	Arsenic	6010 7060 7061
Barium	(Total)	Barium	6010 7080
Benzene	71-43-2	Benzene	8020 8240
Benzo[a]- anthracene; Benzanthracene	56-55-3	Benz[a]anthracene	8100 8270
Benzo[b]fluoran- thene	205-99-2	Benz[e]acephen- anthrylene	8100 8270