

## Chapter NR 499

TRAINING AND CERTIFICATION REQUIREMENTS  
FOR SOLID WASTE TREATMENT FACILITY OPERATORS

NR 499.01	Applicability; purpose	NR 499.08	Review and approval of training programs
NR 499.02	Definitions	NR 499.09	Solid waste treatment facility operator examination and certification
NR 499.03	Exemptions	NR 499.10	Solid waste treatment facility operator refresher training, certification renewal and expiration
NR 499.04	Solid waste treatment facilities	NR 499.11	Fees
NR 499.05	Identification of persons or positions involved in the operation of a solid waste treatment facility	NR 499.12	Suspension and revocation of certifications
NR 499.06	Certification levels		
NR 499.07	Solid waste treatment facility operator initial training program requirements		

**NR 499.01 Applicability; purpose.** (1) **APPLICABILITY.** This chapter applies to any person participating in or responsible for the operation of a solid waste treatment facility that burns solid waste, to owners of solid waste treatment facilities and to any person who offers training programs for solid waste treatment facility operators.

(2) **PURPOSE.** This chapter is adopted under s. 144.31 (3), Stats., to establish by rule a program for the training and certification of solid waste treatment facility operators.

**History:** Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.02 Definitions.** The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(1) "Approved training program" means a curriculum developed by a facility or an independent sponsor and approved by the department under this chapter for the purpose of training solid waste treatment facility operators.

(2) "Burndown" means the final cycle in the operation of a solid waste treatment facility in which solid waste is no longer being charged, burners are designed to shut off automatically after a specified period of time, charging doors are locked and the equipment is allowed to cool.

(3) "Certificate" means a printed document issued by the department, pursuant to this chapter, stating that the named individual has met the competency requirements established for a solid waste treatment facility operator.

(4) "Certified operator" means a person who has completed an approved training program, passed an examination in accordance with this chapter, and has been issued a certificate by the department.

(5) "Chief facility operator" means a person who has completed an approved training program and passed a department examination at this certification level. A chief facility operator is responsible for the overall supervision and monitoring of performance of a solid waste treatment facility and facility personnel.

**Note:** Chief facility operator responsibilities are in s. NR 499.06.

(6) "Crematory" means a facility that has a combustion device for the purpose of burning exclusively human corpses or animal bodies.

(7) "Independent sponsor" means any person other than the department or a solid waste treatment facility that develops an approved training program.

(8) "Interim chief facility operator" means a shift operator temporarily assigned the duties of a chief facility operator.

(9) "Interim shift operator" means a person who has completed an approved training program, passed a training program examination and been issued a 6 month certificate by the department.

(10) "Refresher training" means training that a certified operator is required to receive on an annual basis to review past training topics and to receive an update on new regulations, practices or procedures.

(11) "Revocation" means an action by the department that withdraws an operator's certification for the remaining term of the certification.

(12) "Shift operator" means a person who has completed an approved training program and passed a department examination at this certification level. A shift operator is responsible for the supervising and monitoring of performance of a solid waste treatment facility and facility personnel during an assigned shift.

(13) "Solid waste" has the meaning given in s. 144.01 (15), Stats.

(14) "Solid waste treatment" or "treatment" has the meaning given in s. 144.43 (7r), Stats.

(15) "Solid waste treatment facility" or "facility" means any facility for solid waste treatment that uses any process that involves burning to change the physical, chemical or biological character or composition of solid waste. This includes an incinerator as defined in s. NR 500.03 (65).

(16) "Suspension" means an action by the department that temporarily withdraws an operator's certification pursuant to this chapter.

**History:** Cr. Register, September, 1993, No. 453, eff. 10-1-93.

Register, December, 1995, No. 480

**NR 499.03 Exemptions.** The following solid waste treatment facilities are exempt from the requirements of this chapter:

- (1) Facilities described in s. 159.07 (7) (bg), Stats.
- (2) Facilities for the treatment of hazardous waste.
- (3) Solid waste treatment facilities for high-volume industrial waste as defined in s. 144.44 (7), Stats.
- (4) Facilities that use burning for treatment of contaminated soil.
- (5) Facilities for the treatment of landfill gases.
- (6) Air curtain destructors as defined in s. 144.436 (1) (a), Stats.
- (7) Facilities that burn alone, or in combination with fossil fuels, waste wood, residual oil or waste solvents.
- (8) Facilities that use incinerators solely as control devices or control systems for the purpose of complying with emission limitations or emission control requirements pursuant to chs. NR 400 to 499.
- (9) Any crematory.
- (10) Any wastewater sludge incinerator.

**History:** Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.04 Solid waste treatment facilities. (1) APPLICABILITY.** This section applies to any owner or operator of a solid waste treatment facility that is not exempt under s. NR 499.03.

**(2) OPERATIONAL REQUIREMENTS.** Any person who owns a solid waste treatment facility shall meet the following requirements:

(a) There shall be one or more certified operators on the site of a solid waste treatment facility at all times during the facility's hours of operation, determined as follows:

1. The hours of operation do not include the burndown cycle for facilities that do not have air pollution control devices.

2. The hours of operation include the burndown cycle for facilities that have air pollution control devices.

(b) Each solid waste treatment facility shall employ at least one certified operator. The level of operator certification required shall be as follows:

1. Any facility that does not have an air pollution control device shall employ at least one shift operator or interim shift operator.

2. Any facility that has an air pollution control device shall employ at least one chief facility operator or interim chief facility operator.

(c) The owner shall notify the department in writing of the appointment of an interim chief facility operator within 10 business days of the appointment. This appointment is valid for 6 months and maybe renewed. Any request for renewing an interim chief facility operator appointment shall be in writing and filed with the department at least 30 days prior to expiration of the 6 month period. The department may deny a request for renewal if

Register, December, 1995, No. 480

the department determines that inadequate attempts have been made to hire a permanent chief facility operator.

**Note:** All submissions under this chapter shall be mailed to the:  
Department of Natural Resources  
Office of Technical Services, Operator Certification  
PO Box 7921  
Madison WI 53707-7921

All applications under this chapter may be obtained from this address.

(d) All certificates issued by the department under this chapter shall be displayed on the premises of the facility where the certified operators are employed.

**History:** Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.05 Identification of persons or positions involved in the operation of a solid waste treatment facility.** Any person who operates a solid waste treatment facility that burns solid waste and is not exempt under s. NR 499.03 shall obtain certification at the appropriate level in s. NR 499.06.

**History:** Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.06 Certification levels.** There are 3 different certification levels established under this chapter, namely: chief facility operator, shift operator and interim shift operator. The duties and responsibilities of these persons or positions for the purpose of determining the level of certification required for these persons are as follows:

(1) A chief facility operator's duties and responsibilities include, but are not limited to, the following:

(a) Overall operation and maintenance of the facility.

(b) Ensuring the facility is operated in accordance with established facility policies and procedures.

(c) Ensuring that shift operators and interim shift operators are trained and certified as required under this chapter, and are familiar with applicable federal, state and local environmental regulations.

(d) Operating the facility in compliance with applicable federal, state and local laws.

(e) Developing and periodically updating policies and procedures for proper and safe facility operations, including, but not limited to, developing and updating any malfunction prevention and abatement plan required under s. NR 439.11.

(2) A shift operator's duties and responsibilities include, but are not limited to, all of the following:

(a) Supervising and monitoring performance of the solid waste treatment facility during an assigned shift.

(b) Keeping records of facility operations, including operational changes and abnormalities.

(c) Operating the facility in compliance with applicable federal, state and local laws during an assigned shift.

(d) Correcting process upsets and malfunctions.

(e) Communicating the operational status of the facility with the relieving shift operator at shift turnover.

(f) Ensuring safe operation.

(g) For facilities without pollution control devices that do not require a chief facility operator, performing the duties and responsibilities in sub. (1).

(3) An interim shift operator's duties and responsibilities are the same as those of the shift operator's as described in sub. (2) and may be performed for no more than 6 months.

History: Cr. Register, September, 1993, No. 453, eff. 10-1-93; am. (2) (intro.), (e) and (g), Register, December, 1995, No. 480, eff. 1-1-96.

**NR 499.07 Solid waste treatment facility operator initial training program requirements.** (1) **APPLICABILITY.** This section applies to any person who submits a training program, other than refresher training, for solid waste treatment facility operators to the department for approval.

(2) **TRAINING PROGRAM REQUIREMENTS.** Training programs shall meet the requirements of this section and be approved by the department under s. NR 499.08. Training programs shall include, at a minimum, 24 hours of instruction for shift operators and an additional 8 hours of instruction for chief facility operators.

(a) Training programs for shift operators shall include, at a minimum, instruction on the following subjects:

1. Environmental concerns including, but not limited to, air contaminants emitted from facilities, pathogen destruction and ash handling requirements.

2. Applicable federal, state and local environmental regulations, including performance standards in 40 CFR 60.50 to 60.59a, and requirements in permits and licenses issued under ss. 144.391, 144.44 and 147.02, Stats.

3. Facility design and waste combustion theory and principles.

4. Different types of solid waste treatment facilities and equipment that burn waste.

5. Identification of waste types acceptable for treatment.

6. Proper waste handling procedures.

7. Proper facility startup, operation, shutdown and maintenance procedures.

8. Ash handling procedures.

9. Work safety procedures.

10. Monitoring and automatic control systems.

11. Record keeping procedures.

12. An introduction to air pollution control equipment.

13. Malfunction prevention and abatement procedures.

(b) In addition to covering the subjects in par. (a), training programs for chief facility operators shall include instruction on the following subjects:

1. Air pollution control systems, including, but not limited to, wet scrubbers, dry scrubbers, fabric filters and electrostatic precipitators, and the design and function of these systems with regard to air pollution, solid waste and wastewater discharges.

2. Solid waste input issues, including the prohibitions in s. 159.07, Stats.

3. Risk management.

(3) **TRAINING PROGRAM EXAMINATION.** Training programs submitted for approval shall include a comprehensive examination for the purposes of testing persons who have completed the training program and want to become certified as an interim shift operator.

(4) **REPORTING.** Within 30 days of the end of an approved training program the department shall be notified of all those who completed the approved training program and their examination scores.

History: Cr. Register, September, 1993, No. 453, eff. 10-1-93; am. (2) (intro.), renum. (2) (a) to (m) to be (2) (a) 1. to 13., (2) (n) (intro.) to be (2) (b) (intro.) and am., Register, December, 1995, No. 480, eff. 1-1-96.

**NR 499.08 Review and approval of training programs.** (1) **APPLICABILITY.** This section applies to any owner of a solid waste treatment facility and to any independent sponsor who submits a training program to the department for approval under this chapter.

(2) **DEPARTMENT APPROVAL.** The department shall approve a training program application if the application contains the following:

(a) An application form.

(b) A training manual that addresses, at a minimum, the subjects specified in s. NR 499.07 (2).

(c) A comprehensive examination as specified in s. NR 499.07 (3).

(d) A list of persons conducting the training and their qualifications.

(e) A procedure for reporting as specified in s. NR 499.07 (4).

(f) The fee specified under s. NR 499.11 (1) (b).

(3) **APPROVAL RENEWAL.** Training program approvals shall be valid for 2 years. An approved training program shall be updated when environmental regulations that apply to solid waste treatment facilities affected by this chapter change. In order to renew training program approval, an application containing the items listed in sub. (2) (b), (c) and (d) shall be submitted to the department 30 days prior to expiration of the training program approval. The department may approve or deny the application for renewal based on whether the application adequately updates the training program.

(4) **DISAPPROVAL.** The department shall disapprove any training program that fails to meet any requirements in ss. NR 499.07, 499.11 and this section.

History: Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.09 Solid waste treatment facility operator examination and certification.** (1) **EXAMINATION APPLICATION.** (a) Any person who wishes to become a certified operator shall take and pass an examination administered by the department under this chapter. Any person applying to the department to take the examination for chief facility operator or shift operator in order to become a certified operator shall:

1. Complete an approved training program within one year prior to the date of application for the written examination.

2. File an application with, and pay the fee in s. NR 499.11 (1) (a) to the department at least 30 days prior to the date of the written examination.

(b) The department shall notify any person applying under par. (a) of their acceptance or rejection for an examination.

(2) **EXAMINATION PROCEDURES.** The department shall conduct written examinations for the purposes of certifying chief facility operators and shift operators according to the following procedures:

(a) Written examinations shall be conducted weekdays at least 3 times annually at 2 different locations in the state.

(b) Written examinations may not be given to persons who did not apply at least 30 days prior to the examination date, who fail to identify themselves on request, who fail to pay the required fees, or who fail to complete an approved training program within one year prior to applying for the written examination.

(c) Examination papers may not be returned to an applicant nor may an applicant review the examination results. Examination papers may be destroyed 60 days after notification of examination results.

(d) Applicants who fail to pass the written examination may apply to the department for reexamination at a subsequent scheduled examination in accordance with sub. (1).

(e) A score of 75% or higher shall be a passing score on the chief facility operator or shift operator examination.

(3) **CERTIFICATION.** (a) Upon satisfactory completion of the chief facility operator or shift operator examination, the department shall issue a certificate to an applicant indicating the level of certification for which the applicant has qualified. Certification is valid for one year from the date of issuance and may be renewed according to s. NR 499.10.

(b) Any person seeking interim shift operator certification shall complete an approved training program, pass the examination administered by the solid waste treatment facility or independent sponsor and file an application for interim shift operator certification with the department. A score of 75% or higher shall be a passing score for an approved training program examination. Any person who successfully completes an approved training program and passes an approved training program examination may immediately begin working as a interim shift operator if the owner of the facility where the operator is employed notifies the department of that person's appointment within 2 business days following the examination. An interim shift operator certification shall be issued within 30 days after the department receives verified documentation that the person has completed the approved training program and passed the examination. Interim shift operator certifications shall be valid for 6 months from the date of issuance and are not renewable. Any person may be granted a new interim shift operator certification

by completing an approved training program and passing an approved training program examination.

History: Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.10 Solid waste treatment facility operator refresher training, certification renewal and expiration. (1) APPLICABILITY.** This section applies to any chief facility operator or shift operator.

(2) **REFRESHER TRAINING.** (a) Any chief facility operator or shift operator shall annually complete a minimum of 4 hours of refresher training in order to renew his or her certification. Refresher training may be provided by the department, facilities or independent sponsors. Refresher training, if not provided by the department, shall be submitted to the department for its approval. The department shall specify in its approval the number of hours of refresher training for which each submittal qualifies. Approval or denial of refresher training shall be based on relevance to the treatment of solid waste.

(b) Any independent sponsor or solid waste treatment facility that provides refresher training shall submit a list of persons who attended the refresher training to the department within 30 days after the refresher training.

(3) **CERTIFICATION RENEWAL.** Any person seeking to renew chief facility operator or shift operator certification shall complete the requirement in sub. (2) before the certification expires. A certified operator shall submit an application for certification renewal to the department at least 30 days prior to expiration of certification. The department shall renew the certification if sufficient documentation is provided that the refresher training requirement has been completed.

(4) **EXPIRATION.** Certifications shall expire one year following issuance unless renewed according to sub. (3). Any chief facility operator or shift operator whose certification has expired may become certified by meeting the requirements of s. NR 499.09.

History: Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.11 Fees.** (1) Fees for examination and training program approval shall be as follows:

(a) Written examination and application fee .. \$50.00  
(b) Approval of training program ..... \$500.00

(2) No fees may be refunded.

History: Cr. Register, September, 1993, No. 453, eff. 10-1-93.

**NR 499.12 Suspension and revocation of certifications. (1)** The department may suspend or revoke any operator's certificate if the department finds that the operator:

(a) Failed to comply with ss. 144.30 to 144.426, Stats., or rules promulgated under those sections; or

(b) Failed to comply with conditions of operation made applicable to a facility by the department.

(2) The department shall suspend or revoke a certification by issuing an order to the certified operator. The order shall state the reasons for suspension or revocation.

(3) Any decision of the department suspending or revoking a certificate may be reviewed in a contested case hearing if the requirements of s. 227.42, Stats., and ch. NR 2 are met. If a request for a contested case hearing is filed,

the suspension or revocation shall be stayed until the department denies the request for hearing or until a final decision is issued following the hearing.

(4) A person whose certification has been revoked may be certified provided the person meets the requirements specified in s. NR 499.09.

**History:** Cr. Register, September, 1993, No. 453, eff. 10-1-93.