

K.A.R. 28-19-729 THROUGH 28-19-729h.

28-19-729. Standards for "Hospital/medical/infectious waste incinerators."

(a) Applicability. Except as otherwise provided in subsection (b) of this regulation, the requirements of the "hospital/medical/infectious waste incinerators" regulations, K.A.R. 28-19-729 through K.A.R. 28-19-729h, shall apply to each individual "hospital/medical/infectious waste incinerator," or "HMIWI," as defined in K.A.R. 28-19-729a, for which construction commenced on or before June 20, 1996.

(b) Exceptions.

(1) The requirements of K.A.R. 28-19-729 through 28-19-729h shall not apply to HMIWI during periods when the HMIWI is burning only pathological waste, low-level radioactive waste, or chemotherapeutic wastes, as defined in K.A.R. 28-19-729a, or any combination of only these waste types, under all of the following conditions:

(A) The owner or operator of the HMIWI notifies the department in writing of an exemption claim under this subsection.

(B) The owner or operator of the HMIWI keeps records, on a calendar quarter basis, of the times, including start and ending times, when only pathological, low-level radioactive, or chemotherapeutic wastes, or a combination of only these wastes, are burned.

(C) The owner or operator of the HMIWI maintains the records for agency inspections in accordance with the provisions of K.A.R. 28-19-729h.

(2) A co-fired combustor, as defined in K.A.R. 28-19-729a, shall not be subject to these regulations if the owner or operator of the combustor does the following:

(A) Notifies the department of the exemption claim;

(B) provides to the department an estimate of the relative weights of "hospital or medical/infectious wastes," fuels, and other wastes to be burned; and

(C) keeps records on a calendar quarter basis of the weight of the "hospital or medical/infectious wastes" and the weight of all other fuels and wastes burned in the device.

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(3) Pyrolysis units, as defined in K.A.R. 28-19-729a, and cement kilns burning "hospital or medical/infectious wastes" shall not be subject to the requirements of these regulations.

(4) Incinerators, boilers, or industrial furnaces subject to the hazardous waste facility permitting requirements of section 3005 of the federal solid waste disposal act, 42 U.S.C. §6925, shall not be subject to these regulations.

(5) Incinerators subject to 40 C.F.R. Part 60, Subparts Cb, Ea, or Eb for municipal waste combustors shall not be subject to these HMIWI regulations.

(c) Incinerators subject to the requirements of K.A.R. 28-19-729 through 28-19-729h shall not be subject to the requirements of K.A.R. 28-19-40 through 28-19-43. (Authorized by K.S.A. 1998 Supp. 65-3005; implementing K.S.A. 1998 Supp. 65-3005, K.S.A. 1998 Supp. 65-3007, and K.S.A. 65-3010; effective May 5, 2000.)

28-19-729a. "Hospital/medical/infectious waste incinerators"; definitions.

(a) The definitions in 40 C.F.R. 60.51c, as in effect on July 1, 1998, are adopted by reference.

(b) "HMIWI" or "hospital/medical/infectious waste incinerator" is defined in 40 C.F.R. 60.51c.

(c) "Small rural hospital/medical/infectious waste incinerator" means a small HMIWI, as defined in 40 C.F.R. 60.51c, that burns less than 2,000 pounds of "hospital or medical/infectious waste" per week and is located more than 50 miles from the boundary of the nearest standard metropolitan statistical area (SMSA).

(d) "Standard metropolitan statistical area" (SMSA) means, for the purposes of these HMIWI regulations, the following:

(1) In Kansas:

- (A) The Topeka SMSA comprised of Shawnee county;
 - (B) the Lawrence SMSA comprised of Douglas county;
 - (C) the Wichita SMSA comprised of Butler, Harvey, and Sedgwick counties; and
 - (D) the Kansas City SMSA comprised of Johnson, Leavenworth, Miami, and Wyandotte counties;
- (2) in Missouri:
 - (A) The Joplin SMSA comprised of Jasper county; and
 - (B) the St. Joseph SMSA comprised of Buchanan county;
 - (3) in Oklahoma:
 - (A) The Enid SMSA comprised of Garfield county; and
 - (B) the Tulsa SMSA comprised of Creek, Osage, Rogers, Tulsa, and Wagoner counties in Oklahoma; and
 - (4) the Lincoln SMSA comprised of Lancaster county in Nebraska. (Authorized by and implementing K.S.A. 1998 Supp. 65-3005; effective May 5, 2000.)

28-19-729b. "Hospital/medical/infectious waste incinerators"; emission standards.

(a) (1) The owner or operator of a "hospital/medical/infectious waste incinerator," or HMIWI, subject to these HMIWI regulations shall not cause or permit emissions from the HMIWI to exceed a visible contaminant emission greater than 10 percent opacity during a six-minute block average, measured as specified in 40 C.F.R. 60.56c as adopted in K.A.R. 28-19-729g.

(2) The owner or operator of any HMIWI subject to these regulations shall not cause or permit emissions from the HMIWI of any pollutants to exceed the emission limits listed in Table 1 of this regulation, measured as specified in 40 C.F.R. 60.56c, as adopted in K.A.R. 28-19-729g.

(b) Exceptions. Air emissions opacity levels that

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exceed the specified limits in paragraph (a)(1) of this regulation shall not be considered a violation of this regulation if the owner or operator of the emission unit demonstrates to the satisfaction of the department that the opacity exceedence is due solely to the presence of uncombined water in the plume. (Authorized by and implementing K.S.A.

Table 1
Emission Limits for HMIWI

Pollutant	Units	Emission Limits (7% oxygen, dry basis)			
		HMIWI Size			
		Small Rural	Small	Medium	Large
Particulate Matter (PM)	Milligrams per dry standard cubic meter (mg/dscm)	197	115	69	34
Carbon Monoxide (CO)	Parts per million by volume (ppmv)	40	40	40	40
Dioxins/furans	Nanograms per dscm total dioxins/furans, or Nanograms per dscm TEQ*	800 total 15 TEQ	125 total 2.3 TEQ	125 total 2.3 TEQ	125 total 2.3 TEQ
Hydrogen Chloride (HCl)	ppmv, or percent (%) reduction	3,100 ppmv	100 ppmv 93%	100 ppmv 93%	100 ppmv 93%
Sulfur Dioxide (SO ₂)	ppmv	55	55	55	55
Nitrogen Oxides (NO _x)	ppmv	250	250	250	250
Lead (Pb)	mg/dscm, or percent (%) reduction	10 mg/dscm	1.2 mg/dscm 70%	1.2 mg/dscm 70%	1.2 mg/dscm 70%
Cadmium (Cd)	mg/dscm, or percent (%) reduction	4 mg/dscm	0.16 mg/dscm 65%	0.16 mg/dscm 65%	0.16 mg/dscm 65%
Mercury (Hg)	mg/dscm, or percent (%) reduction	7.5 mg/dscm	0.55 mg/dscm 85%	0.55 mg/dscm 85%	0.55 mg/dscm 85%

1998 Supp. 65-3005; effective May 5, 2000.)

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28-19-729c. Standards for "hospital/medical/infectious waste incinerators"; compliance schedule.

(a) Except as otherwise provided in subsection (b) of this regulation, the owner or operator of each HMIWI subject to the emission limits in K.A.R. 28-19-729b shall comply with all of the applicable requirements of K.A.R. 28-19-729 through 28-19-729h on or before the date one year after the effective date of EPA's approval of the state's HMIWI plan.

(b) (1) The owner or operator of an HMIWI may petition the department for an extension to the compliance date specified in subsection (a) of this regulation. This petition shall be prepared in accordance with the provisions of subsection (c) of this regulation.

(2) The compliance date for each HMIWI for which a compliance date extension petition is approved shall be no later than September 15, 2002.

(c) Each petition for a compliance date extension shall be submitted to the department within 180 days after the effective date of EPA's approval of the state's HMIWI emission guidelines implementation plan, and shall include the following components:

(1) Documentation and analysis to support the need for an extension, including an evaluation of the option to transport the waste off-site to a commercial medical waste treatment and disposal facility on a temporary or permanent basis;

(2) submittal of an emissions control plan, describing the air pollution controls or process modifications, or both, that are to be used to comply with the emission limits in K.A.R. 28-19-729b;

(3) a compliance schedule, with dates, for the following steps:

(i) The awarding of contracts for air pollution control systems, process modifications, or orders for purchase of components;

(ii) the initiation of on-site construction or

installation of air pollution control equipment, process modifications, or both;

(iii) the completion of on-site construction or installation of air pollution control equipment, process modifications, or both; and

(iv) the conduct of performance testing, and final compliance with the applicable requirements of K.A.R. 28-19-729b through 28-19-729h.

(d) The owner or operator of an HMIWI for which a timely and complete compliance date extension petition has been submitted to the department may continue to operate the HMIWI until the petition has been approved or disapproved, if the owner or operator adheres to the compliance schedule outlined in the submitted petition. (Authorized by and implementing K.S.A. 1998 Supp. 65-3005; effective May 5, 2000.)

28-19-729d. "Hospital/medical/infectious waste incinerators"; operation, operator training, and qualification standards.

(a) (1) For the purposes of these regulations, a "trained and qualified HMIWI operator" or "HMIWI operator" means a person who has completed the requirements of subsections (b) and (c) of this regulation, and who maintains the qualifications in accordance with the requirements of subsection (e) as required.

(2) A trained and qualified HMIWI operator either shall be at the HMIWI facility at all times or shall be generally able to reach the facility within one hour at all times the incinerator is in operation.

(3) Any HMIWI subject to these regulations shall be operated only by a trained and qualified HMIWI operator, or by a person or persons working under the direct supervision of a trained and qualified HMIWI operator.

(b) The HMIWI operator training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following elements:

(1) Training on the following subjects:

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(A) Environmental concerns, including pathogen destruction and types of emissions;

(B) basic combustion principles, including products of combustion;

(C) operation of the type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

(D) combustion controls and monitoring;

(E) operation of air pollution control equipment and factors affecting performance, if applicable;

(F) methods to monitor pollutants, including continuous emission monitoring systems and monitoring of HMIWI and air pollution control device operating parameters, and equipment calibration procedures, where applicable;

(G) inspection and maintenance of the HMIWI, air pollution control devices, and continuous emission monitoring systems;

(H) actions to correct malfunctions or conditions that may lead to malfunction;

(I) bottom and fly ash characteristics and handling procedures;

(J) applicable federal, state, and local regulations;

(K) work safety procedures;

(L) pre-startup inspections; and

(M) recordkeeping requirements;

(2) an examination designed and administered by the instructor of the training course; and

(3) reference material distributed to the attendees covering the course topics.

(c) HMIWI operator qualification shall be obtained by

the following:

(1) Completion of a training course that satisfies the criteria listed in paragraph (b)(1) of this regulation; and

(2) six months of experience as an HMIWI operator, six months of experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under the observation of a qualified HMIWI operator.

(d) HMIWI operator qualification shall be valid from the date on which the examination is passed or the completion of the required experience, whichever is later.

(e) To maintain qualification, the trained and qualified HMIWI operator shall complete an annual review or refresher course covering the following:

(1) Update of regulations;

(2) incinerator operation, including startup and shutdown procedures;

(3) inspection and maintenance;

(4) responses to malfunctions or conditions that may lead to malfunction; and

(5) discussion of operating problems encountered by attendees.

(f) A lapsed qualification shall be renewed by one of the following procedures:

(1) For a lapse of less than three years, the HMIWI operator shall complete and pass a standard annual refresher course described in subsection (e) of this regulation.

(2) For a lapse of three years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in paragraph (b)(1) of this regulation.

(g) The owner or operator of an HMIWI subject to these regulations shall maintain documentation at the facility that

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addresses the following:

- (1) A summary of the applicable standards under this regulation;
 - (2) a description of basic combustion theory applicable to HMIWI;
 - (3) procedures for receiving, handling, and charging waste;
 - (4) HMIWI startup, shutdown, and malfunction procedures;
 - (5) procedures for maintaining proper combustion air supply levels;
 - (6) procedures for operating the HMIWI and associated air pollution control systems within the standards established under this regulation;
 - (7) procedures for responding to periodic malfunction or conditions that may lead to malfunction;
 - (8) procedures for monitoring HMIWI emissions;
 - (9) reporting and recordkeeping procedures; and
 - (10) procedures for handling ash.
- (h) The owner or operator of a HMIWI subject to these regulations shall review with each HMIWI operator the information listed in subsection (g) of this regulation.
- (1) The initial review of the information listed in subsection (g) of this regulation shall be conducted within one year of the date of EPA approval of the state's HMIWI plan, or before the assumption of responsibilities affecting HMIWI operation, whichever date is later.
 - (2) Subsequent reviews of the information listed in subsection (g) of this regulation shall be conducted annually. (Authorized by and implementing K.S.A. 1998 Supp. 65-3005; effective May 5, 2000.)

28-19-729e. "Hospital/medical/infectious waste incinerators"; waste management plan.

The owner or operator of the HMIWI facility shall prepare a waste management plan in accordance with 40 C.F.R. 60.55c, as in effect on July 1, 1998, which is hereby adopted by reference. (Authorized by and implementing K.S.A. 1998 Supp. 65-3005; effective May 5, 2000.)

28-19-729f. "Hospital/medical/infectious waste incinerators"; inspections.

(a) The owner or operator of each small rural HMIWI subject to this regulation, as defined in K.A.R. 28-19-729a(c), shall conduct an initial equipment inspection of the HMIWI within one

year from the date the department receives EPA approval of the state's HMIWI plan.

(b) At a minimum, the owner or operator shall perform the following:

(1) Inspect all burners, pilot assemblies, and pilot sensing devices for proper operation, and clean the pilot flame sensor, as necessary;

(2) ensure proper adjustment of primary and secondary chamber combustion air, and adjust as necessary;

(3) inspect hinges and door latches, and lubricate as necessary;

(4) inspect dampers, fans, and blowers for proper operation;

(5) inspect HMIWI door and door gaskets for proper sealing;

(6) inspect motors for proper operation;

(7) inspect primary chamber refractory lining, and clean and repair or replace the lining as necessary;

(8) inspect the incinerator shell for corrosion and hot

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spots;

(9) inspect the secondary and tertiary chambers and stack, and clean as necessary;

(10) inspect the mechanical loader, including limit switches, for proper operation, if applicable;

(11) visually inspect the waste bed grates, and repair or seal, or both, as appropriate;

(12) for the burn cycle that follows the inspection, document that the incinerator is operating properly and make any necessary adjustments;

(13) inspect air pollution control devices for proper operation, if applicable;

(14) inspect waste heat boiler systems to ensure proper operation, if applicable;

(15) inspect bypass stack components;

(16) ensure proper calibration of thermocouples, sorbent feed systems, and any other monitoring equipment; and

(17) generally observe that the equipment is maintained in good operating condition.

(c) (1) Within 10 operating days following an equipment inspection, all necessary repairs shall be completed, unless the owner or operator obtains a written approval from the department, extending the time allowed for the necessary repairs.

(2) All approvals for time extensions to this requirement shall establish the date by which all necessary repairs are to be completed.

(d) Each small rural HMIWI subject to the emission limits specified in K.A.R. 28-19-729b shall undergo an equipment inspection annually, no later than 12 months following the previous annual equipment inspection, which shall include the inspection elements in subsections (b) and (c) of this regulation. (Authorized by and implementing

K.S.A. 1998 Supp. 65-3005; effective May 5, 2000.)

28-19-729g. "Hospital/medical/infectious waste incinerators"; compliance, performance testing, and monitoring guidelines.

(a) (1) Except as provided in subsection (b) of this regulation, each individual HMIWI subject to these regulations shall meet the compliance and performance testing requirements in 40 C.F.R. 60.56c, as in effect on July 1, 1998, which is adopted by reference except for the fugitive emissions testing requirements in 40 C.F.R. 60.56c(b)(12) and (c)(3).

(2) To meet the testing requirements of paragraph (a)(1) of this regulation, the operator or owner of each HMIWI shall use the appropriate test methods listed in 40 C.F.R. 60.56c and adopted in K.A.R. 28-19-720.

(b) Each small rural HMIWI subject to these regulations, as defined in K.A.R. 28-19-729a(c), shall meet the following compliance and performance testing requirements:

(1) (A) The owner or operator of the small rural HMIWI shall conduct the performance testing in accordance with the requirements in 40 C.F.R. 60.56c(a), (b)(1) through (b)(9), (b)(11) for mercury (Hg) only, and (c)(1).

(B) The 2,000 pounds per week limitation in K.A.R. 28-19-729a(c) shall not apply during these performance tests.

(2) The owner or operator of the small rural HMIWI shall establish a maximum charge rate and minimum secondary chamber temperature as site-specific operating parameters during the initial performance test to determine compliance with applicable emission limits.

(3) (A) Following the date on which the initial performance test is completed, the owner or operator of the small rural HMIWI shall ensure that the HMIWI does not operate above the maximum charge rate or below the minimum secondary chamber temperature, measured as three-hour rolling averages, calculated each hour as the average of the previous three hours, or as the average of the burn cycle if the burn cycle is less than three hours, at all times except during periods of startup, shutdown, and malfunction.

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(B) Operating parameter limits shall not apply during performance tests.

(C) Operation either above the maximum charge rate or below the minimum secondary chamber temperature shall constitute a violation of the established operating parameters.

(4) Except as provided in paragraph (b)(5) of this regulation, operation of the HMIWI above the maximum charge rate and below the minimum secondary chamber temperature, each measured on a three-hour rolling average or as the average of the burn cycle if the burn cycle is less than three hours, simultaneously shall constitute a violation of the particulate matter, carbon monoxide, and "dioxin/furan" emission limits.

(5) (A) The owner or operator of the small rural HMIWI may conduct a repeat performance test within 30 days of violation of an applicable operating parameter to demonstrate that the designated facility is not in violation of the applicable emission limit.

(B) Repeat performance tests conducted pursuant to this subsection shall be conducted under operating parameters equivalent to the operating conditions that indicated a violation under paragraph (b)(4) of this regulation.

(c) Except as specified in subsection (d) of this regulation, each HMIWI subject to these regulations shall meet the monitoring requirements of 40 C.F.R. 60.57c, as in effect on July 1, 1998, which is hereby adopted by reference.

(d) The owner or operator of each small rural HMIWI subject to these regulations, as defined in K.A.R. 28-19-729a, shall meet the following monitoring requirements:

(1) Install, calibrate to the manufacturer's specifications, maintain, and operate a device for measuring and recording the temperature of the secondary chamber on a continuous basis, the output of which shall be recorded, at a minimum frequency of once every minute throughout operation.

(2) The owner or operator of the small rural HMIWI shall install, calibrate to the manufacturer's specifications, maintain, and operate a device that automatically measures and

records the date, time, and weight of each charge of waste fed to the HMIWI.

(3) (A) The owner or operator of a small rural HMIWI subject to these regulations shall obtain the monitoring data required by paragraphs (d)(1) and (d)(2) of this regulation at all times during HMIWI operation, except during periods of monitoring equipment malfunction, calibration, or repair.

(B) The owner or operator shall obtain and record valid monitoring data for not less than 75 percent of the operating hours per day, and for not less than 90 percent of the operating hours per calendar quarter that the HMIWI is combusting "hospital or medical/infectious waste."
(Authorized by K.S.A. 1999 Supp. 65-3005; implementing K.S.A. 1999 Supp. 65-3005 and K.S.A. 1999 Supp. 65-3007; effective May 5, 2000)

28-19-729h. "Hospital/medical/infectious waste incinerators"; reporting and recordkeeping.

(a) Except as otherwise provided in subsection (b) of this regulation, the owner or operator of an HMIWI that is subject to these regulations shall meet the reporting and recordkeeping requirements listed in 40 C.F.R. 60.58c(b), (c), (d), (e), and (f), as in effect on July 1, 1998 and hereby adopted by reference, excluding 40 C.F.R. 60.58c(b)(2)(ii), fugitive emissions, and (b)(7), siting.

(b) The owner or operator of each small rural HMIWI subject to the emission limits in K.A.R. 28-19-729b shall comply with the following reporting and recordkeeping requirements:

(1) The owner or operator of the small rural HMIWI shall maintain records of the annual equipment inspections, any required maintenance, and any repairs not completed within 10 days of an inspection or the time frame established by the department pursuant to K.A.R. 28-19-729f(c).

(2) The owner or operator of the small rural HMIWI shall submit an annual report, signed by the facility manager, containing information recorded in accordance with paragraph (b)(1) of this regulation no later than March 1 following the calendar year in which data were collected.

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(3) The owner or operator shall send subsequent annual reports no later than 12 calendar months following the previous report.

(4) Once the unit is subject to the department's class I air operating permit program, the owner or operator shall submit these reports semiannually. (Authorized by K.S.A. 1998 Supp. 65-3005; implementing K.S.A. 1998 Supp. 65-3005 and K.S.A. 1998 Supp. 65-3007; effective May 5, 2000.)

