CHAPTER I: POLLUTION CONTROL BOARD SUBCHAPTER C: HAZARDOUS WASTE OPERATING REQUIREMENTS PART 724 STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES SUBPART A: GENERAL PROVISIONS Section 724.101 Purpose, Scope, and Applicability 724.103 Relationship to Interim Status Standards 724.104 Electronic Reporting SUBPART B: GENERAL FACILITY STANDARDS Section Applicability
724.111 USEPA Identification Number
724.112 Required Notices
724.113 General Waste Analysis
724.114 Security
724.115 General Inspection Requirements
724.116 Personnel Training
724.117 General Requirements for Ignitable, Reactive, or Incompatible Wastes
724.118 Location Standards
724.119 Construction Quality Assurance Program SUBPART C: PREPAREDNESS AND PREVENTION Section 724.130 Applicability
724.131 Design and Operation of Facility
724.132 Required Equipment
724.133 Testing and Maintenance of Equipment
724.134 Access to Communications or Alarm System
724.135 Required Aisle Space
724.137 Arrangements with Local Authorities SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES Section 724.150 Applicability 724.151 Purpose and Implementation of Contingency Plan Content of Contingency Plan 724.152 724.153 Copies of Contingency Plan
724.154 Amendment of Contingency Plan
724.155 Emergency Coordinator 724.156 Emergency Procedures SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING Section Applicability 724.170 724.171 Use of Manifest System

TITLE 35: ENVIRONMENTAL PROTECTION

SUBTITLE G: WASTE DISPOSAL

724.172		Manifest Discrepancies
724.173		Operating Record
724.174		Availability, Retention, and Disposition of Records
724.175		Annual Facility Activities Report
724.176		Unmanifested Waste Report
724.177		Additional Reports
SUBPART	F:	RELEASES FROM SOLID WASTE MANAGEMENT UNITS
Section		
724.190		Applicability
724.191		Required Programs
724.192		Groundwater Protection Standard
724.193		Hazardous Constituents
724.194		Concentration Limits
724.195		Point of Compliance
724.196 724.197		Compliance Period
724.197		General Groundwater Monitoring Requirements Detection Monitoring Program
724.196		Compliance Monitoring Program
724.200		Corrective Action Program
724.201		Corrective Action for Solid Waste Management Units
SUBPART	G:	CLOSURE AND POST-CLOSURE CARE
Section		
724.210		Applicability
724.211		Closure Performance Standard
724.212		Closure Plan; Amendment of Plan
724.213		Closure; Time Allowed For Closure
724.214		Disposal or Decontamination of Equipment, Structures, and Soils
724.215		Certification of Closure
724.216		Survey Plat
724.217		Post-Closure Care and Use of Property
724.218		Post-Closure Care Plan; Amendment of Plan
724.219		Post-Closure Notices Certification of Completion of Post-Closure Care
724.220		Certification of Completion of Post-Closure Care
SUBPART	Н:	FINANCIAL REQUIREMENTS
Section		
724.240		Applicability
724.241		Definitions of Terms as Used in This Subpart
724.242		Cost Estimate for Closure
724.243		Financial Assurance for Closure
		Cost Estimate for Post-Closure Care
724.245		Financial Assurance for Post-Closure Care
724.246		Use of a Mechanism for Financial Assurance of Both Closure and Post
Closure		
724.247		Liability Requirements
724.248		Incapacity of Owners or Operators, Guarantors, or Financial
Institut 724.251		s Wording of the Instruments
PODLYKI	⊥:	USE AND MANAGEMENT OF CONTAINERS

Section

```
SUBPART W: DRIP PADS
   Section
                            Applicability
Assessment of Existing Drip Pad Integrity
Design and Installation of New Drip Pads
Design and Operating Requirements
Inspections
Closure
   724.670
                                   Applicability
  724.671
   724.672
   724.673
   724.674
   724.675
   SUBPART X: MISCELLANEOUS UNITS
   Section
   724.700
                                        Applicability
   724.701
                                        Environmental Performance Standards
                                    Monitoring, Analysis, Inspection, Response, Reporting, and
   724.702
   Corrective Action
                                    Post-Closure Care
   724.703
  SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS
  Section
                               Applicability
  724.930
                                    Definitions
  724.931
  724.932 Standards: Process Vents
724.933 Standards: Closed-Vent Systems and Control Devices
                                    Test Methods and Procedures
  724.934
                                   Recordkeeping Requirements
  724.935
  724.936
                                    Reporting Requirements
  SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS
  Section
                                  Applicability
Definitions
  724.950
  724.951
 724.951
724.952
724.953
724.953
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724.955
724.956
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724.959 Standards: Delay of Repair
724.960 Standards: Closed-Vent Systems and Control Devices
724.961 Alternative Percentage Standard for Valves
724.962 Skip Period Alternative for Valves
724.963 Test Methods and Procedures
724.964 Recordkeeping Requirements
724.965 Reporting Requirements
  SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND
  CONTAINERS
  Section
  724.980
                                    Applicability
  724.981
                                    Definitions
```

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724.982
           Standards: General
           Waste Determination Procedures
724.983
724.984
           Standards: Tanks
724.985
           Standards: Surface Impoundments
724.986
           Standards: Containers
           Standards: Closed-Vent Systems and Control Devices
724.987
724.988
           Inspection and Monitoring Requirements
724.989
           Recordkeeping Requirements
724.990
           Reporting Requirements
724.991
           Alternative Control Requirements for Tanks (Repealed)
SUBPART DD: CONTAINMENT BUILDINGS
Section
724.1100
           Applicability
724.1101
           Design and Operating Standards
724.1102
           Closure and Post-Closure Care
SUBPART EE: HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE
Section
724.1200
           Applicability
           Design and Operating Standards
724.1201
724.1202
           Closure and Post-Closure Care
724. Appendix APPENDIX A Recordkeeping Instructions
724. Appendix APPENDIX B EPA Report Form and Instructions (Repealed)
724. Appendix APPENDIX D Cochran's Approximation to the Behrens-Fisher Student's
T-Test
724. Appendix A
                E Examples of Potentially Incompatible Waste
724. Appendix APPENDIX I Groundwater Monitoring List
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AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R82-19 at 7 Ill. Reg. 14059, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1136, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14119, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 Ill. Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 Ill. Reg. 13577, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19397, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13135, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 458, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18527, effective Nov. November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14511, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16658, effective Sept. September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9654, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14572, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17702, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5806, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20830, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6973, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12487, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17601, effective Nov.November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9951, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11244, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 636, effective December 16, 1997; amended

in R98-12 at 22 Ill. Reg. 7638, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17972, effective Sept.September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2186, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9437, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1146, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9833, effective June 20, 2000; expedited correction at 25 Ill. Reg. 5115, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26 Ill. Reg. 6635, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3725, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6009, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6365, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 3196, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 893, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. ______, effective

SUBPART B: GENERAL FACILITY STANDARDS

Section 724.115 General Inspection Requirements

- a) The owner or operator must conduct inspections often enough to identify problems in time to correct them before they harm human health or the environment. The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, and discharges that may be causing or may lead to either of the following:
- 1) Release of hazardous waste constituents to the environment; or
- 2) A threat to human health.
 - b) Inspection schedule.
- 1) The owner or operator must develop and follow a written schedule for inspecting monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment (such as dikes and sump pumps) that are important to preventing, detecting, or responding to environmental or human health hazards.
- 2) The owner or operator must keep this schedule at the facility.
- 3) The schedule must identify the types of problems (e.g., malfunctions or deterioration) that are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.).
- 4) The frequency of inspection may vary for the items on the schedule. However, the frequency should be based on the rate of deterioration of the equipment and the probability of an environmental or human health incident if the deterioration, malfunction, or—any operator error goes undetected between inspections. Areas subject to spills, such as loading and unloading areas, must be inspected daily when in use, except for the owner or operator of a Performance Track member facility, which must inspect at least once each month after approval by the Agency, as described in subsection (b)(5) of this Section. At a minimum, the inspection schedule must include the items and frequencies called for in Sections 724.274, 724.293, 724.295, 724.326, 724.354, 724.378, 724.403, 724.447, 724.702, 724.933, 724.952, 724.953, 724.958, and 724.983 through 724.990, where applicable.

BOARD NOTE: 35 Ill. Adm. Code 703 requires the inspection schedule to be submitted with Part B of the permit application. The Agency must evaluate the schedule along with the rest of the application to ensure that it adequately protects human health and the environment. As part of this review, the Agency may modify or amend the schedule as may be necessary.

- 5) The owner or operator of a Performance Track member facility that chooses to reduce its inspection frequency must fulfill the following requirements:
- A) It must submit a request for a Class I permit modification with prior approval to the Agency. The modification request must identify its facility as a member of the National Environmental Performance Track Program, and it must identify the management units for reduced inspections and the proposed frequency of inspections. The modification request must also specify, in writing, that the reduced inspection frequency will apply for as long as its facility is a Performance Track member facility, and that within seven calendar days of ceasing to be a Performance Track member, the owner or operator will revert to the non-Performance Track inspection frequency, as provided in subsection (b)(4) of this Section. Inspections pursuant to this subsection (b)(5) must be conducted at least once each month.
- B) Within 60 days, the Agency must notify the owner or operator of the Performance Track member facility, in writing, if the request submitted pursuant to subsection (b)(5)(A) of this Section is approved, denied, or if an extension to the 60-day deadline is needed. This notice must be placed in the facility's operating record. The owner or operator of the Performance Track member facility should consider the application approved if the Agency does not either deny the application or notify the owner or operator of the Performance Track member facility of an extension to the 60-day deadline. In these situations, the owner or operator of the Performance Track member facility must adhere to the revised inspection schedule outlined in its request for a Class 1 permit modification and keep a copy of the application in the facility's operating record.
- C) Any owner or operator of a Performance Track member facility that discontinues its membership or which USEPA terminates from the program must immediately notify the Agency of its change in status. The facility owner or operator must place in its operating record a dated copy of this notification and revert back to the non-Performance Track inspection frequencies within seven calendar days.
- c) The owner or operator must remedy any deterioration or malfunction of equipment or structures that the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.
- d) The owner or operator must record inspections in an inspection log or summary. The owner or operator must keep these records for at least three years from the date of inspection. At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made and the date, and nature of any repairs or other remedial actions.

(Source:	Amended a	at 32	111.	Reg.	 effective	 =

- a) The personnel training program.
- 1) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of this Part. The owner or operator must ensure that this program includes all the elements described in the document required under subsection (d)(3) of this Section.

BOARD NOTE: 35 Ill. Adm. Code 703 requires that owners and operators submit with Part B of the RCRA permit application, an outline of the training program used (or to be used) at the facility and a brief description of how the training program is designed to meet actual jobs tasks.

- 2) This program must be directed by a person trained in hazardous waste management procedures, and must include instruction that teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed.
- 3) At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems, including, where applicable:
- A) Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment;
- B) Key parameters for automatic waste feed cut-off systems;
- C) Communications or alarm systems;
- D) Response to fires or explosions;
- E) Response to groundwater contamination incidents; and
- F) Shutdown of operations.
- 4) For facility employees that have receive emergency response training pursuant to the federal Occupational Safety and Health Administration (OSHA) regulations at 29 CFR 1910.120(p)(8) and (q), the facility is not required to provide separate emergency response training pursuant to this Section, provided that the overall facility OSHA emergency response training meets all the requirements of this Section.
- b) Facility personnel must successfully complete the program required in subsection (a) of this Section within six months after the effective date of these regulations or six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees hired after the effective date of these regulations must not work in unsupervised positions until they have completed the training requirements of subsection (a) of this Section.
- c) Facility personnel must take part in an annual review of the initial training required in subsection (a) of this Section.
- d) The owner or operator must maintain the following documents and records at the facility:

- 1) The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job;
- 2) A written job description for each position listed under subsection (d)(1) of this Section. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education or other qualifications, and duties of employees assigned to each position;
- 3) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under subsection (d)(1) of this Section;
- 4) Records that document that the training or job experience required under subsections (a), (b), and (c) of this Section has been given to, and completed by, facility personnel.
- e) Training records on current personnel must be kept until closure of the facility; training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

Source:	Amended	at	32	Ill.	Reg.	, effective	
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Section 724.118 Location Standards

- a) Seismic considerations.
- 1) Portions of new facilities where treatment, storage or disposal of hazardous waste will be conducted must not be located within 61 meters (200 feet) of a fault that has had displacement in Holocene time.
- 2) As used in subsection (a)(1) of this Section:
- A) "Fault" means a fracture along which rocks on one side have been displaced with respect to those on the other side.
- B) "Displacement" means the relative movement of any two sides of a fault measured in any direction.
- C) "Holocene" means the most recent epoch of the Quarternary Quaternary period, extending from the end of the Pleistocene to the present.

BOARD NOTE: Procedures for demonstrating compliance with this standard in Part B of the permit application are specified in 35 Ill. Adm. Code 703.182. Facilities that are located in political jurisdictions other than those listed in appendix VI to 40 CFR 264 (Political Jurisdictions in Which Compliance with § 264.18(a) Must Be Demonstrated), incorporated by reference in 35 Ill. Adm. Code 720.111(b), are assumed to be in compliance with this requirement.

- b) Floodplains.
- 1) A facility located in a 100 <u>-</u>year floodplain must be designed, constructed, operated and maintained to prevent washout of any hazardous waste by a 100-year flood, unless the owner or operator can demonstrate the following to the Agency's satisfaction:

- A) That procedures are in effect that will cause the waste to be removed safely, before flood waters can reach the facility, to a location where the wastes will not be vulnerable to flood waters; or
- B) For existing surface impoundments, waste piles, land treatment units, landfills and miscellaneous units, that no adverse effect on human health or the environment will result if washout occurs, considering the following:
- i) The volume and physical and chemical characteristics of the waste in the facility;
- ii) The concentration of hazardous constituents that would potentially affect surface waters as a result of washout;
- iii) The impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and
- iv) The impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain that could result from washout;
 - 2) As used in subsection (b)(1) of this Section:
- A) "100-year floodplain" means any land area that is subject to a one percent or greater chance of flooding in any given year from any source.
- B) "Washout" means the movement of hazardous waste from the active portion of the facility as a result of flooding.
- C) "100-year flood" means a flood that has a one percent chance of being equalled or exceeded in any given year.

BOARD NOTE: Requirements pertaining to other federal laws that affect the location and permitting of facilities are found in 40 CFR 270.3. For details relative to these laws, see EPA's manual for SEA (special environmental area) requirements for hazardous waste facility permits. Though EPA is responsible for complying with these requirements, applicants are advised to consider them in planning the location of a facility to help prevent subsequent project delays. Facilities may be required to obtain from the Illinois Department of Transportation on a permit or certification that a facility is flood-proofed.

c) Salt dome formations, salt bed formations, underground mines and caves. The placement of any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground cave or mine is prohibited.

(Source:	Amended	at	32	Ill.	Reg.	, ef	fective	
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SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section 724.152 Content of Contingency Plan

a) The contingency plan must describe the actions facility personnel must take to comply with Sections 724.151 and 724.156 in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

b) If the owner or operator has already prepared a Spill Prevention Control and Countermeasures (SPCC) Plan in accordance with federal 40 CFR 112 or 300, or some other emergency or contingency plan, the owner or operator need only amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this Part. The owner or operator may develop one contingency plan that meets all regulatory requirements. USEPA has recommended that the plan be based on the National Response Team's Integrated Contingency Plan Guidance (One Plan). When modifications are made to non-RCRA provisions in an integrated contingency plan, the changes do not trigger the need for a RCRA permit modification.

BOARD NOTE: The federal One Plan guidance appeared in the Federal Register at 61 Fed. Reg. 28642 (June 5, 1996), and was corrected at 61 Fed. Reg. 31103 (June 19, 1996). USEPA, Office of Solid Waste and Emergency Response, Chemical Emergency Preparedness and Prevention Office, has made these documents available on-line for examination and download at yosemite.epa.gov/oswer/Ceppoweb.nsf/content/serc-lepc-publications.htm.

- c) The plan must describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services pursuant to Section 724.137.
- d) The plan must list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator (see Section 724.155), and this list must be kept up to date. Where more than one person is listed, one must be named as primary emergency coordinator and others must be listed in the order in which they will assume responsibility as alternates. For new facilities, this information must be supplied to the Agency at the time of certification, rather than at the time of permit application.
- e) The plan must include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list and a brief outline of its capabilities.
- f) The plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signals to be used to begin evacuation, evacuation routes and alternative evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

(Source:	Amended	at	32	Ill.	Reg.	 effective	

Section 724.156 Emergency Procedures

- a) Whenever there is an imminent or actual emergency situation, the emergency coordinator (or the designee when the emergency coordinator is on call) must immediately do the following:
- 1) He or she must activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and
- 2) He or she must notify appropriate State or local agencies with designated response roles if their help is needed.

- b) Whenever there is a release, fire, or explosion, the emergency coordinator must immediately identify the character, exact source, amount, and areal extent of any released materials. The emergency coordinator may do this by observation or review of facility records or manifests and, if necessary, by chemical analysis.
- c) Concurrently, the emergency coordinator must assess possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment must consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heatinduced explosions).
- d) If the emergency coordinator determines that the facility has had a release, fire, or explosion that could threaten human health or the environment outside the facility, the emergency coordinator must report the findings as follows:
- 1) If the assessment indicates that evacuation of local areas may be advisable, the emergency coordinator must immediately notify appropriate local authorities. The emergency coordinator must be available to help appropriate officials decide whether local areas should be evacuated; and
- 2) The emergency coordinator must immediately notify either the government official designated as the on-scene coordinator for that geographical area (in the applicable regional contingency plan pursuant to federal 40 CFR 300) or the National Response Center (using their 24-hour toll free number 800-424-8802). The report must include the following:
- A) The name and telephone number of the reporter;
- B) The name and address of the facility;
- C) The time and type of incident (e.g., release, fire);
- D) The name and quantity of materials involved, to the extent known;
- E) The extent of injuries, if any; and
- F) The possible hazards to human health or the environment outside the facility.
- e) During an emergency, the emergency coordinator must take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing release waste, and removing or isolating containers.
- f) If the facility stops operations in response to a fire, explosion, or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate.
- g) Immediately after an emergency, the emergency coordinator must provide for treating, storing, or disposing of recovered waste, contaminated soil or surface

water, or any other material that results from a release, fire, or explosion at the facility.

BOARD NOTE: Unless the owner or operator can demonstrate, in accordance with 35 Ill. Adm. Code 721.103(d) or (e), that the recovered material is not a hazardous waste, the owner or operator becomes a generator of hazardous waste and must manage it in accordance with all applicable requirements of 35 Ill. Adm. Code 722, 723, and 724.

- h) The emergency coordinator must ensure that the following is true in the affected areas of the facility:
- 1) No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed; and
- 2) All emergency equipment listed in the contingency plan is cleaned and fit for its intended use before operations are resumed.
- i) The owner or rator must notify the compliance with subsection (h) of thislocal authorities that the facility is in-compliance with subsection (h) of this-Section before operations are reason in the affected areas of the facility.
- jii) The owner or operator must note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator must submit a written report on the incident to the Agency. The report must include the following:
- 1) The name, address, and telephone number of the owner or operator;
- 2) The name, address, and telephone number of the facility;
- 3) The date, time, and type of incident (e.g., fire, explosion);
- 4) The name and quantity of materials involved;
- 5) The extent of injuries, if any;
- 6) An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
- 7) The estimated quantity and disposition of recovered material that resulted from the incident.

(Source: A	mended	at	32	Ill.	Req.	<pre>—, effective</pre>	

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

Section 724.171 Use of Manifest System

a) Receipt of manifested hazardous waste.

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- 1) The following ratio to the following:

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 The following ratio to the following:
- A) It must sign and date each copy of the manifest to certify that the hazardous waste covered by the manifest was received;
- B) It must note any significant discrepancies in the manifest (as defined in-Section 724.172(a)) on each c f the saifest;
- BOARD NOTE: The Board does not intend that the owner or operator of a facility-whose procedures under Section 724.113(c) include waste analysis must perform that analysis before signing the manifest and giving it to the transporter.

 Section 724.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.
- C) It must i ly give the transfer at least on y of the sign hanifest;
- D) It must send a copy of the manifest to the generator and to the Agencywithin 30 days after delivery; and
- E) It must retain at the facility a copy of each manifest for at least threeyears after the date of delivery.
- 2) The following requirements apply effective Sept. 5, 2006:A1) If a facility receives hazardous waste accompanied by a manifest, the owner, operator, or its agent must sign and date the manifest, as indicated in subsection (a)(2)(B) of this Section, to certify that the hazardous waste covered by the manifest was received, that the hazardous waste was received except as noted in the discrepancy space of the manifest, or that the hazardous waste was rejected as noted in the manifest discrepancy space.
- ${\tt B2})$ If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or its agent must do the following:
- iAA) It must sign and date, by hand, each copy of the manifest;
- $\frac{\text{iiBB}}{\text{iiBB}}$) It must note any discrepancies (as defined in Section 724.172(b)) on each copy of the manifest;
- $\underline{\text{iiiCC}}$) It must immediately give the transporter at least one copy of the manifest;
- $\underline{\text{ivDD}}$) It must send a copy of the manifest to the generator within 30 days after delivery; and

- **VEE**) It must retain at the facility a copy of each manifest for at least three years after the date of delivery.
- E3) If a facility receives hazardous waste imported from a foreign source, the receiving facility must mail a copy of the manifest to the following address within 30 days after delivery: International Compliance Assurance Division, OFA/OECA (2254A), U.S. Environmental Protection Agency, Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460.
- : Subsection (a) (1) of this Section corr 's wit CFR 264.71(a) (2004), effective until Sept. 5, 2006. Subsection (a) (2) of this Section corresponds with 40 CFR 264.71(a) (2005), effective Sept. 5, 2006.
- b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator's certification, and signatures), the owner or operator, or the owner or operator's agent, must do the following:
- 1) It must sign and date each copy of the manifest or shipping paper (if the manifest has not been received) to certify that the hazardous waste covered by the manifest or shipping paper was received;
- 2) It must note any significant discrepancies (as defined in Section 724.172(a)) in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

BOARD NOTE: The Board does not intend that the owner or operator of a facility whose procedures under Section 724.113(c) include waste analysis must perform that analysis before signing the shipping paper and giving it to the transporter. Section 724.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

- 3) It must immediately give the rail or water (bulk shipment) transporter at least one copy of the manifest or shipping paper (if the manifest has not been received);
- 4) It must forward copies of the manifest as follows:
- A) Until Sept. 5, 2 : The owner tor must s c f the si land dated manifest to the generator and to the Agency within 30 days after the
 delivery; however, if the manifest has not been received within 30 days after
 delivery, the owner or operator, or the owner or operator's agent, must send a
 copy of the shipping paper signed and dated to the generator; or
- B4) Effective Sept. 5, 2006: The owner or operator must send a copy of the signed and dated manifest or a signed and dated copy of the shipping paper (if the manifest has not been received within 30 days after delivery) to the generator within 30 days after the delivery; and

BOARD NOTE: Section 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment). Subsection (b) (4) (A) is derived from 40 CFR 264.74(b) (4) (2004),

effective until 3c t. 5, 2 . Subsection (b)(4)(B) is deri from 40 CFR 264.7)(4) (2 5), effective Sept. 5, 2006.

- 5) Retain at the facility a copy of the manifest and shipping paper (if signed in lieu of the manifest at the time of delivery) for at least three years from the date of delivery.
- c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722.

BOARD NOTE: The provisions of 35 Ill. Adm. Code 722.134 are applicable to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of Section 722.134 only apply to owners or operators that are shipping hazardous waste that they generated at that facility.

d) Within three working days after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of the facility must provide a copy of the tracking document bearing all required signatures to the notifier; to the Office of Enforcement and Compliance Assurance, Office of Compliance, Enforcement Planning, Targeting and Data Division (2222A), Environmental Protection Agency, 401 M St., SW, Washington, DC 20460; to the Bureau of Land, Division of Land Pollution Control, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276; and to competent authorities of all other concerned countries. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature.

(Source: Amended at 32 Ill. Reg. _____, effective _______)

Section 724.172-Manifest Discrepancies_Manifest Discrepancies

a) The following requirements apply until Sept. 5, 2005:

1) Definition of a "manifest discrepancy."

A) A manifest discrepancy is a difference between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity or type of haz swaste a facility actually receives;

B) A significant discrepancy in quantity is as follows:

i) For bulk waste, variations greater than 10 percent in weight;

ii) For batch waste, any variation in piece e t, such as a discrepancy fone drum in a truckload;

C) Significant discrepancies in type are obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or toxic constituents not reported on the manifest or shipping paper.

2) Upon discovering a significant discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submitto the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.

b) The following requirements apply effective Sept. 5, 2005:

- ±a) "Manifest discrepancies" are defined as any one of the following:
- A1) Significant differences (as defined by subsection (b)(2) of this Section) between the quantity or type of hazardous waste designated on the manifest or shipping paper, and the quantity and type of hazardous waste a facility actually receives;
- B2) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or
- Container residues, which are residues that exceed the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b).
- 2b) "Significant differences in quantity" are defined as the appropriate of the following: for bulk waste, variations greater than 10 percent in weight; or, for batch waste, any variation in piece count, such as a discrepancy of one drum in a truckload. "Significant differences in type" are defined as obvious differences that can be discovered by inspection or waste analysis, such as waste solvent substituted for waste acid, or as toxic constituents not reported on the manifest or shipping paper.
- 3c) Upon discovering a significant difference in quantity or type, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter (e.g., with telephone conversations). If the discrepancy is not resolved within 15 days after receiving the waste, the owner or operator must immediately submit to the Agency a letter describing the discrepancy and attempts to reconcile it, and a copy of the manifest or shipping paper at issue.
- 4 d) Rejection of hazardous waste.
- A1) Upon rejecting waste or identifying a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b), the facility must consult with the generator prior to forwarding the waste to another facility that can manage the waste. If it is impossible to locate an alternative facility that can receive the waste, the facility may return the rejected waste or residue to the generator. The facility must send the waste to the alternative facility or to the generator within 60 days after the rejection or the container residue identification.
- B2) While the facility is making arrangements for forwarding rejected wastes or residues to another facility under this Section, it must ensure that either the delivering transporter retains custody of the waste, or the facility must provide for secure, temporary custody of the waste, pending delivery of the

waste to the first transporter designated on the manifest prepared under subsection $(\frac{b}{b})(5)$ (e) or $\frac{(b)(6)}{(6)}$ (f) of this Section.

- 5e) Except as provided in subsection— $\frac{(b)(5)(G)}{(e)}$ (e)(7) of this Section, for full or partial load rejections and residues that are to be sent off-site to an alternate facility, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following—instructions set forth in subsections (e)(1) through (e)(6) of this Section:
- A1) Write the generator's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space in Item 5.
- $^{\mathrm{B}2}$) Write the name of the alternate designated facility and the facility's USEPA identification number in the designated facility block (Item 8) of the new manifest.
- C3) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- D4) Copy the manifest tracking number found in Item 4 of the new manifest to the manifest reference number line in the Discrepancy Block of the old manifest (Item 18a).
- E5) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.
- F6) Sign the Generator's/Offeror's Certification to certify, as the offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- G7) For full load rejections that are made while the transporter remains present at the facility, the facility may forward the rejected shipment to the alternate facility by completing Item 18b of the original manifest and supplying the information on the next destination facility in the Alternate Facility space. The facility must retain a copy of this manifest for its records, and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections $(\frac{b}{b})$ (5) (A) (b) (b) (b) (b) (b) (b) (b) (b) (c) (d) (d)
- 6f) Except as provided in subsection—(b)(6)(G) (f)(7) of this Section, for rejected wastes and residues that must be sent back to the generator, the facility is required to prepare a new manifest in accordance with 35 Ill. Adm. Code 722.120(a) and the following—instructions set forth in subsections (f)(1) through (f)(6) of this Section:
- A1) Write the facility's USEPA identification number in Item 1 of the new manifest. Write the generator's name and mailing address in Item 5 of the new manifest. If the mailing address is different from the generator's site address, then write the generator's site address in the designated space for Item 5.

- B2) Write the name of the initial generator and the generator's USEPA identification number in the designated facility block (Item 8) of the new manifest.
- ©3) Copy the manifest tracking number found in Item 4 of the old manifest to the Special Handling and Additional Information Block of the new manifest, and indicate that the shipment is a residue or rejected waste from the previous shipment.
- E5) Write the USDOT description for the rejected load or the residue in Item 9 (USDOT Description) of the new manifest and write the container types, quantity, and volumes of waste.
- F6) Sign the Generator's/Offeror's Certification to certify, as offeror of the shipment, that the waste has been properly packaged, marked and labeled and is in proper condition for transportation.
- G7) For full load rejections that are made while the transporter remains at the facility, the facility may return the shipment to the generator with the original manifest by completing Item 18b of the manifest and supplying the generator's information in the Alternate Facility space. The facility must retain a copy for its records and then give the remaining copies of the manifest to the transporter to accompany the shipment. If the original manifest is not used, then the facility must use a new manifest and comply with subsections $\frac{b}{b} \cdot \frac{b}{h} \cdot \frac{b}{h$
- Fig. If a facility rejects a waste or identifies a container residue that exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code 721.107(b) after it has signed, dated, and returned a copy of the manifest to the delivering transporter or to the generator, the facility must amend its copy of the manifest to indicate the rejected wastes or residues in the discrepancy space of the amended manifest. The facility must also copy the manifest tracking number from Item 4 of the new manifest to the Discrepancy space of the amended manifest, and must re-sign and date the manifest to certify to the information as amended. The facility must retain the amended manifest for at least three years from the date of amendment, and must within 30 days, send a copy of the amended manifest to the transporter and generator that received copies prior to their being amended.

BOARD NOTE: Subsection (a) is derived from 40 CFR 264.72 (2004), effective-until Sept. 5, 2006. Subsection (b) is derived from 40 CFR 264.72 (2005), effective Sept. 5, 2006.

(Source: Amended at 32 Ill. Reg. ____, effective _____

Section 724.173 Operating Record

a) The owner or operator must keep a written operating record at the facility.

- b) The following information must be recorded as it becomes available and maintained in the operating record until closure of the facility for three years unless otherwise provided as follows:
- 1) A description and the quantity of each hazardous waste received and the method or methods and date or dates of its treatment, storage, or disposal at the facility, as required by Appendix A of this Part. This information must be maintained in the operating record until closure of the facility;
- 2) The location of each hazardous waste within the facility and the quantity at each location. For disposal facilities, the location and quantity of each hazardous waste must be recorded on a map or diagram of that shows each cell or disposal area. For all facilities, this information must include cross-references to specific manifest document numbers, if the waste was accompanied by a manifest. This information must be maintained in the operating record until closure of the facility;

BOARD NOTE: See Section 724.219 for related requirements.

- 3) Records and results of waste analyses and waste determinations performed as specified in Sections 724.113, 724.117, 724.414, 724.441, 724.934, 724.963, and 724.983 and in 35 Ill. Adm. Code 728.104(a) and 728.107;
- 4) Summary reports and details of all incidents that require implementing the contingency plan, as specified in Section 724.156(j);
- 5) Records and results of inspections, as required by Section 724.115(d) (except these data need to be kept only three years);
- Monitoring, testing, or analytical data and corrective action data where required by Subpart F of this Part or Sections 724.119, 724.291, 724.293, 724.295, 724.322, 724.323, 724.326, 724.352 through 724.354, 724.376, 724.378, 724.380, 724.402 through 724.404, 724.409, 724.447, 724.702, 724.934(c) through (f), 724.935, 724.963(d) through (i), 724.964, and 724.982 through 724.990. Maintain in the operating record for three years, except for records and results pertaining to **mund water**groundwater** monitoring and cleanup, which must be maintained in the operating record until closure of the facility;
- 7) For off-site facilities, notices to generators as specified in Section 724.112(b);
- 8) All closure cost estimates under Section 724.242 and, for disposal facilities, all post-closure care cost estimates under Section 724.244. This information must be maintained in the operating record until closure of the facility;
- 9) A certification by the permittee, no less often than annually: that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that the permittee generates, to the degree the permittee determines to be economically practicable, and that the proposed method of treatment, storage, or disposal is that practicable method currently available to the permittee that minimizes the present and future threat to human health and the environment;
- 10) Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension of the effective date of any land disposal restriction granted pursuant to 35 Ill. Adm. Code 728.105, a petition pursuant to 35 Ill. Adm. Code 728.106 or a

certification under 35 Ill. Adm. Code 728.108, and the applicable notice required of a generator under 35 Ill. Adm. Code 728.107(a). This information must be maintained in the operating record until closure of the facility;

- 11) For an off-site treatment facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108;
- 12) For an on-site treatment facility, the information contained in the notice (except the manifest number), and the certification and demonstration, if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108;
- 13) For an off-site land disposal facility, a copy of the notice, and the certification and demonstration, if applicable, required of the generator or the owner or operator of a treatment facility under 35 Ill. Adm. Code 728.107 or 728.108, whichever is applicable;
- 14) For an on-site land disposal facility, the information contained in the notice required of the generator or owner or operator of a treatment facility under 35 Ill. Adm. Code 728.107, except for the manifest number, and the certification and demonstration, required under 35 Ill. Adm. Code 728.108, whichever is applicable;
- 15) For an off-site storage facility, a copy of the notice, and the certification and demonstration if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108;
- 16) For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108; and
- 17) Any records required under Section 724.101(j)(13)-;
- 18) Monitoring, testing, or analytical data where required by Section 724.447 must be maintained in the operating record for five years; and
- 19) Certifications, as required by Section 724.296(f), must be maintained in the operating record until closure of the facility.

(Source:	Amended	at	32	Ill.	Reg.	 effective	 	

Section 724.175 Annual Facility Activities Report

The owner or operator must prepare and submit a single copy of an annual facility activities report to the Agency by March 1 of each year. The report form supplied by the Agency must be used for this report. The annual facility activities report must cover facility activities during the previous calendar year and must include the following information:

- a) The USEPA identification number, name, and address of the facility;
- b) The calendar year covered by the report;
- c) For off-site facilities, the USEPA identification number of each hazardous waste generator from which the facility received a hazardous waste during the

year; for imported shipments, the report must give the name and address of the foreign generator;

- d) A description and the quantity of each hazardous waste the facility received during the year. For off-site facilities, this information must be listed by USEPA identification number of each generator;
- e) The method of treatment, storage, or disposal for each hazardous waste;
- f) This subsection (f) corresponds with 40 CFR 264.75(f), which USEPA has designated as "reserved." This statement maintains structural consistency with the USEPA rules;
- g) The most recent closure cost estimate under Section 724.242, and, for disposal facilities, the most recent post-closure cost estimate under Section 724.244;
- h) For generators that treat, store or dispose of hazardous waste on-site, a description of the efforts undertaken during the year to reduce the volume and toxicity of the waste generated;
- i) For generators that treat, store or dispose of hazardous waste on-site, a description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years, to the extent such information is available for years prior to 1984; and
- j) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative.

BOARD NOTE: Corresponding 40 CFR 264.75 requires biennial reporting. The Board has required annual reporting, since Section 20.1 of the Act [415 ILCS 5/20.1 (2006)] requires the Agency to assemble annual reports, and only annual facility activityactivities reports will enable the Agency to fulfill this mandate.

(Source:	Amended at	t 32	Ill.	Reg		effective <u> </u>			
Section 7	724.176 -Unm	anife	sted	Waste	Report_	Unmanifested	Waste	Report	

paper as described in 35 Ill. Adm. Code 723.120(e)(2), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 721.105, then the owner or operator must prepare and submit a single copy of a report to the Agency within 15 days after receiving the waste. The unmanifested waste reportmust be submitted on EPA form 8700-13B. Such report must be designated "Unmanifested Waste Report" and include the following information:

- 1) The USEPA identification number, name, and address of the facility;
- 2) The date the facility received the waste;
- 3) The USEPA identification number, name, and address of the generator and the transporter, if available;
- 5) The method of treatment, storage, or disposal for each hazardous waste;
- 6) The certification signed by the owner or operator of the facility or the owner or operator's authorized representative; and
- The following reviewents by effective Sept. 5, 2 ... If a facility accepts for treatment, storage, or disposal any hazardous waste from an off-site source without an accompanying manifest, or without an accompanying shipping paper, as described by 35 Ill. Adm. Code 723.120(e), and if the waste is not excluded from the manifest requirement by 35 Ill. Adm. Code 260 through 265, then the owner or operator must prepare and submit a letter to the Agency within 15 days after receiving the waste. The unmanifested waste report must contain the following information:
 - 1) The USEPA identification number, name, and address of the facility;
 - 2) The date the facility received the waste;
- 3) The USEPA identification number, name, and address of the generator and the transporter, if available;
- 4) A description and the quantity of each unmanifested hazardous waste the facility received;
- 5) The method of treatment, storage, or disposal for each hazardous waste;
- 6) The certification signed by the owner or operator of the facility or its authorized representative; and
 - 7) A brief explanation of why the waste was unmanifested, if known.
- b) This subsection (b) corresponds with 40 CFR 264.76(b), which USEPA has marked "reserved." This statement maintains structural consistency with the corresponding federal regulations.

BOARD NOTE: Small quantities of hazardous waste are excluded from regulation under this Part and do not require a manifest. Where a facility receives unmanifested hazardous wastes, USEPA has suggested that the owner or operator

obtain from each generator a certification that the waste qualifies for exclusion. Otherwise, the Board USEPA has suggested that the owner or operator file an unmanifested waste report for the hazardous waste movement. Subsection (a) is derived from 40 CFR 264.76 (2004), effective until Sept. 5, 2006.

Subsection (b) is derived from 40 CFR 264.76 (2005), effective Sept.September 5, 2006.

(Source:	Amended	at	32	Ill.	Reg.	 effective
)					

SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

Section 724.197 General Groundwater Monitoring Requirements

The owner or operator must comply with the following requirements for any groundwater monitoring program developed to satisfy Section 724.198, 724.199, or 724.200.

- a) The groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer that fulfill the following requirements:
- 1) They represent the quality of background water groundwater that has not been affected by leakage from a regulated unit. A determination of background groundwater quality may include sampling of wells that are not hydraulically upgradient from the waste management area where the following is true:
- A) Hydrogeologic conditions do not allow the owner or operator to determine what wells are upgradient; or
- B) Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells;
- 2) They represent the quality of groundwater passing the point of compliance; and
- 3) They allow for the detection of contamination when hazardous waste or hazardous constituents have migrated from the hazardous waste management area to the uppermost aguifer.
- b) If a facility contains more than one regulated unit, separate groundwater monitoring systems are not required for each regulated unit provided that provisions for sampling the groundwater in the uppermost aquifer will enable detection and measurement at the compliance point of hazardous constituents from the regulated units that have entered the groundwater in the uppermost aquifer.
- c) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must be screened or perforated and packed with gravel or sand, where necessary, to enable collection of groundwater samples. The annular space (i.e., the space between the bore hole and well casing) above the sampling depth must be sealed to prevent contamination of samples and the groundwater.
- d) The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the waste management area.

At a minimum the program must include procedures and techniques for the following:

- Sample collection;
 - 2) Sample preservation and shipment;
 - 3) Analytical procedures; and
 - 4) Chain of custody control.
- e) The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents in groundwater samples.
- f) The groundwater monitoring program must include a determination of the groundwater surface elevation each time groundwater is sampled.
- g) In detection monitoring or where appropriate in compliance monitoring, data on each hazardous constituent specified in the permit will be collected from background wells and wells at the compliance points. The number and kinds of samples collected to establish background must be appropriate for the form of statistical test employed, following generally accepted statistical principles. The sample size must be as large as necessary to ensure with reasonable confidence that a contaminant release to groundwater from a facility will be detected. The owner or operator will determine an appropriate sampling procedure and interval for each hazardous constituent listed in the facility permit that must be specified in the unit permit upon approval by the Agency. This sampling procedure must fulfill the following requirements:
- 1) It may be a sequence of at least four samples, taken at an interval that assures, to the greatest extent technically feasible, that an independent sample is obtained, by reference to the uppermost aquifer's effective porosity, hydraulic conductivity and hydraulic gradient, and the fate and transport characteristics of the potential contaminants; or
- 2) It may be an alternate sampling procedure proposed by the owner or operator and approved by the Agency.
- h) The owner or operator must specify one of the following statistical methods to be used in evaluating groundwater monitoring data for each hazardous constituent that, upon approval by the Agency, will be specified in the unit permit. The statistical test chosen must be conducted separately for each hazardous constituent in each well. Where practical quantification limits (pqls) are used in any of the following statistical procedures to comply with subsection (i)(5) of this Section, the pql must be proposed by the owner or operator and approved by the Agency. Use of any of the following statistical methods must adequately protect human health and the environment and must comply with the performance standards outlined in subsection (i) of this Section.
- 1) A parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.
- 2) An analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of

contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

- 3) A tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.
- 4) A control chart approach that gives control limits for each constituent.
- 5) Another statistical test method submitted by the owner or operator and approved by the Agency.
- i) Any statistical method chosen pursuant to subsection (h) of this Section for specification in the unit permit must comply with the following performance standards, as appropriate:
- 1) The statistical method used to evaluate groundwater monitoring data must be appropriate for the distribution of chemical parameters or hazardous constituents. If the distribution of the chemical parameters or hazardous constituents is shown by the owner or operator to be inappropriate for a normal theory test, then the data should be transformed or a distribution-free theory test should be used. If the distributions for the constituents differ, more than one statistical method may be needed.
- 2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test must be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparisons procedure is used, the Type I experimentwise error rate for each testing period must be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals or control charts.
- 3) If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter value must be proposed by the owner or operator and approved by the Agency if the Agency finds it to adequately protect human health and the environment.
- 4) If a tolerance interval or a prediction interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, must be proposed by the owner or operator and approved by the Agency if the Agency finds these parameters to adequately protect human health and the environment. These parameters will be determined after considering the number of samples in the background database, the data distribution, and the range of the concentration values for each constituent of concern.
- 5) The statistical method must account for data below the limit of detection with one or more statistical procedures that adequately protect human health and the environment. Any practical quantification limit (pqlpql) approved by the Agency pursuant to subsection (h) of this Section that is used in the statistical method must be the lowest concentration level that can be reliably

achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

- 6) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability, as well as temporal correlation in the data.
- j) Groundwater monitoring data collected in accordance with subsection (g) of this Section, including actual levels of constituents, must be maintained in the facility operating record. The Agency must specify in the permit when the data must be submitted for review.

Source:	Amended	at	32	Ill.	Reg.	,	effective)
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Section 724.198 Detection Monitoring Program

An owner or operator required to establish a detection monitoring program under this Subpart F must, at a minimum, discharge the following responsibilities:

- a) The owner or operator must monitor for indicator parameters (e.g., specific conductance, total organic carbon, or total organic halogen), waste constituents or reaction products that provide a reliable indication of the presence of hazardous constituents in groundwater. The Agency must specify the parameters or constituents to be monitored in the facility permit, after considering the following factors:
- 1) The types, quantities, and concentrations of constituents in wastes managed at the regulated unit;
- 2) The mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the waste management area;
- 3) The detectability of indicator parameters, waste constituents, and reaction products in groundwater; and
- 4) The concentrations or values and coefficients of variation of proposed monitoring parameters or constituents in the groundwater background.
- b) The owner or operator must install a groundwater monitoring system at the compliance point as specified under Section 724.195. The groundwater monitoring system must comply with Sections 724.197(a)(2), 724.197(b), and 724.197(c).
- c) The owner or operator must conduct a groundwater monitoring program for each chemical parameter and hazardous constituent specified in the permit pursuant to subsection (a) of this Section in accordance with Section 724.197(g). The owner or operator must maintain a record of groundwater analytical data $_{7}$ as measured and in a form necessary for the determination of statistical significance under Section 724.197(h).
- d) The Agency must specify the frequencies for collecting samples and conducting statistical tests to determine whether there is statistically significant evidence of contamination for any parameter or hazardous constituent specified in the permit conditions under subsection (a) of this Section in accordance with Section 724.197(g).—A sequence of at least four samples from each well (background and compliance wells) must be collected at least semi-annually during detection itoring.

- e) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- f) The owner or operator must determine whether there is statistically significant evidence of contamination for any chemical parameter or hazardous constituent specified in the permit pursuant to subsection (a) of this Section at a frequency specified under subsection (d) of this Section.
- 1) In determining whether statistically significant evidence of contamination exists, the owner or operator must use the methods specified in the permit under Section 724.197(h). These methods must compare data collected at the compliance points to the background groundwater quality data.
- 2) The owner or operator must determine whether there is statistically significant evidence of contamination at each monitoring well at the compliance point within a reasonable period of time after completion of sampling. The Agency must specify in the facility permit what period of time is reasonable, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.
- g) If the owner or operator determines pursuant to subsection (f) of this Section that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents specified pursuant to subsection (a) of this Section at any monitoring well at the compliance point, the owner or operator must do the following:
- 1) Notify the Agency of this finding in writing within seven days. The notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination.
- 2) Immediately sample the groundwater in all monitoring wells and determine whether constituents in the list of Appendix I of this Part are present, and if so, in what concentration. However, the Agency must allow sampling for a site-specific subset of constituents from the Appendix I list of this Part and for other representative or related waste constituents if it determines that sampling for that site-specific subset of contaminants and other constituents is more economical and equally effective for determining whether groundwater contamination has occurred.
- 3) For any compounds in Appendix I of this Part found in the analysis pursuant to subsection (g)(2) of this Section, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the Agency and repeat the analysis for those compounds detected. If the results of the second analysis confirm the initial results, then these constituents will form the basis for compliance monitoring. If the owner or operator does not resample for the compounds found pursuant to—set forth in subsection (g)(2) of this Section, the hazardous constituents found during this initial Appendix I analysis will form the basis for compliance monitoring.
- 4) Within 90 days, submit to the Agency an application for a permit modification to establish a compliance monitoring program meeting the requirements of Section 724.199. The application must include the following information:
- A) An identification of the concentration of any constituent in Appendix I of this Part detected in the groundwater at each monitoring well at the compliance point;

- B) Any proposed changes to the groundwater monitoring system at the facility necessary to meet the requirements of Section 724.199;
- C) Any proposed additions or changes to the monitoring frequency, sampling and analysis procedures or methods, or statistical methods used at the facility necessary to meet the requirements of Section 724.199;
- D) For each hazardous constituent detected at the compliance point, a proposed concentration limit under Section 724.194(a)(1) or (a)(2), or a notice of intent to seek an alternate concentration limit under Section 724.194(b).
 - 5) Within 180 days, submit the following to the Agency:
- A) All data necessary to justify an alternate concentration limit sought under Section 724.194(b); and
- B) An engineering feasibility plan for a corrective action program necessary to meet the requirement of Section 724.200, unless the following is true:
- i) All hazardous constituents identified under subsection (g)(2) of this Section are listed in Table 1 of Section 724.194 and their concentrations do not exceed the respective values given in that table; or
- ii) The owner or operator has sought an alternate concentration limit under Section 724.194(b) for every hazardous constituent identified under subsection (g)(2) of this Section.
- If the owner or operator determines, pursuant to subsection (f) of this Section, that there is a statistically significant difference for chemical parameters or hazardous constituents specified pursuant to subsection (a) of this Section at any monitoring well at the compliance point, the owner or operator may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis or statistical evaluation, or natural variation in the groundwater. The owner or operator may make a demonstration under this subsection (g) in addition to, or in lieu of, submitting a permit modification application under subsection (g)(4) of this Section; however, the owner or operator is not relieved of the requirement to submit a permit modification application within the time specified in subsection (g)(4) of this Section unless the demonstration made under this subsection (g) successfully shows that a source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this subsection (g), the owner or operator must do the following:
- A) Notify the Agency in writing, within seven days of determining statistically significant evidence of contamination at the compliance point, that the owner or operator intends to make a demonstration under this subsection (g);
- B) Within 90 days, submit a report to the Agency that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation;

- C) Within 90 days, submit to the Agency an application for a permit modification to make any appropriate changes to the detection monitoring program facility; and
- D) Continue to monitor in accordance with the detection monitoring program established under this Section.
- h) If the owner or operator determines that the detection monitoring program no longer satisfies the requirements of this Section, the owner or operator must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

Source:	Amended	at	32	Ill.	Reg.	, effective _	
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Section 724.199 Compliance Monitoring Program

An owner or operator required to establish a compliance monitoring program under this Subpart F must, at a minimum, discharge the following responsibilities:

- a) The owner or operator must monitor the groundwater to determine whether regulated units are in compliance with the groundwater protection standard under Section 724.192. The Agency must specify the groundwater protection standard in the facility permit, including the following:
- 1) A list of the hazardous constituents identified under Section 724.193;
- 2) Concentration limits under Section 724.194 for each of those hazardous constituents;
 - 3) The compliance point under Section 724.195; and
 - 4) The compliance period under Section 724.196.
- b) The owner or operator must install a groundwater monitoring system at the compliance point as specified under Section 724.195. The groundwater monitoring system must comply with Section 724.197(a)(2), 724.197(b), and 724.197(c).
- c) The Agency must specify the sampling procedures and statistical methods appropriate for the constituents and facility, consistent with Section 724.197(g) and (h).
- 1) The owner or operator must conduct a sampling program for each chemical parameter or hazardous constituent in accordance with Section 724.297(g).
- 2) The owner or operator must record groundwater analytical data as measured and in a form necessary for the determination of statistical significance under Section 724.197(h) for the compliance period of the facility.
- d) The owner or operator must determine whether there is statistically significant evidence of increased contamination for any chemical parameter or hazardous constituent specified in the permit, pursuant to subsection (a) of this Section, at a frequency specified under subsection (f) of this Section.
- 1) In determining whether statistically significant evidence of increased contamination exists, the owner or operator must use the methods specified in the permit under Section 724.197(h). The methods must compare data collected at

the compliance points to a concentration limit developed in accordance with Section 724.194.

- 2) The owner or operator must determine whether there is statistically significant evidence of increased contamination at each monitoring well at the compliance point within a reasonable time period after completion of the sampling. The Agency must specify that time period in the facility permit, after considering the complexity of the statistical test and the availability of laboratory facilities to perform the analysis of groundwater samples.
- e) The owner or operator must determine the groundwater flow rate and direction in the uppermost aquifer at least annually.
- f) The Agency must specify the frequencies for collecting samples and conducting statistical tests to determine statistically significant evidence of increased contamination in accordance with Section 724.197(g).—A sequence of atleast four samples from each well (background and compliance wells) must be collected at least semi-annually during the compliance period for the facility.
- The owner or operator must annually analyze s s from all itoring wells at the compliance point for all constituents contained in Appendix I ofthis Part at least annually to determine whether additional hazardous constituents from Appendix I of this Part, which could possibly be present but are not on the detection monitoring list in the permit, are actually present in the uppermost aquifer and, if so, at what concentration, pursuant to procedures in Section 724.198(f). If the owner or operator finds constituents of Appendix-I of this Part in the itering itering constituents, the owner or operator may resample within one month and repeat the Appendix I analysis. If the second analysis confirms the presence of newconstituents, the owner or operator must report the concentration of these additional constituents to the Agency within seven days after the completion of the second analysis, and add them to the monitoring list. If the owner or operator chooses not to resample, then the owner or operator must report the concentrations of these additional constituents to the Agency within seven days after completion of the initial analysis, and add them to the monitoring list. To accomplish this, the owner or operator must consult with the Agency to determine the following on a case-by-case basis: which sample collection event during the year will involve enhanced sampling; the number of monitoring wells at the compliance point to undergo enhanced sampling; the number of samples to be collected from each of these monitoring wells; and, the specific constituents from Appendix I of this Part for which these samples must be analyzed. If the enhanced sampling event indicates that Appendix I constituents are present in the ground water that are not already identified in the permit as monitoring constituents, the owner or operator may resample within one month or at an alternative site-specific schedule approved by the Agency, and repeat the analysis. If the second analysis confirms the presence of new constituents, the owner or operator must report the concentration of these additional constituents to the Agency within seven days after the completion of the second analysis and add them to the monitoring list. If the owner or operator chooses not to resample, then it must report the concentrations of these additional constituents to the Agency within seven days after completion of the initial analysis, and add them to the monitoring list.
- h) If the owner or operator determines, pursuant to subsection (d) of this Section that any concentration limits under Section 724.194 are being exceeded at any monitoring well at the point of compliance, the owner or operator must do the following:

- 1) Notify the Agency of this finding in writing within seven days. The notification must indicate what concentration limits have been exceeded.
- Submit to the Agency an application for a permit modification to establish a corrective action program meeting the requirements of Section 724.200 within 180 days, or within 90 days if an engineering feasibility study has been previously submitted to the Agency under Section $\frac{724.198}{(h)}$ $\frac{(h)}{(5)}$ 724.198 $\frac{(g)}{(5)}$. The application must at a minimum include the following information:
- A) A detailed description of corrective actions that will achieve compliance with the groundwater protection standard specified in the permit under subsection (a) of this Section; and
- B) A plan for a groundwater monitoring program that will demonstrate the effectiveness of the corrective action. Such a groundwater monitoring program may be based on a compliance monitoring program developed to meet the requirements of this Section.
- i) If the owner or operator determines, pursuant to subsection (d) of this Section, that the groundwater concentration limits under this Section are being exceeded at any monitoring well at the point of compliance, the owner or operator may demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in groundwater. In making a demonstration under this subsection (i), the owner or operator must do the following:
- 1) Notify the Agency in writing within seven days that it intends to make a demonstration under this subsection (i);
- 2) Within 90 days, submit a report to the Agency that demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standards resulted from error in sampling, analysis $_{\tau}$ or evaluation;
- 3) Within 90 days, submit to the Agency an application for a permit modification to make any appropriate changes to the compliance monitoring program at the facility; and
- 4) Continue to monitor in accord with the compliance monitoring program established under this Section.
- j) If the owner or operator determines that the compliance monitoring program no longer satisfies the requirements of this Section, the owner or operator must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(Source:	Amended	at	32	Ill.	Reg.	 effective	
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Section 724.200 Corrective Action Program

An owner or operator required to establish a corrective action program pursuant to this Subpart F must, at a minimum, discharge the following responsibilities:

a) The owner or operator must take corrective action to ensure that regulated units are in compliance with the groundwater protection standard pursuant to

Section 724.192. The Agency must specify the groundwater protection standard in the facility permit, including the following:

- 1) A list of the hazardous constituents identified pursuant to Section 724.193;
- 2) Concentration limits pursuant to Section 724.194 for each of those hazardous constituents;
 - 3) The compliance point pursuant to Section 724.195; and
 - 4) The compliance period pursuant to Section 724.196.
- b) The owner or operator must implement a corrective action program that prevents hazardous constituents from exceeding their respective concentration limits at the compliance point by removing the hazardous waste constituents or treating them in place. The permit will specify the specific measures that must be taken.
- c) The owner or operator must begin corrective action within a reasonable time period after the groundwater protection standard is exceeded. The Agency must specify that time period in the facility permit. If a facility permit includes a corrective action program in addition to a compliance monitoring program, the permit will specify when the corrective action must begin and such a requirement will operate in lieu of Section 724.199(i)(2).
- d) In conjunction with a corrective action program, the owner or operator must establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program. Such a monitoring program may be based on the requirements for a compliance monitoring program pursuant to Section 724.199 and must be as effective as that program in determining compliance with the groundwater protection standard pursuant to Section 724.192 and in determining the success of a corrective action program pursuant to subsection (e) of this Section where appropriate.
- e) In addition to the other requirements of this Section, the owner or operator must conduct a corrective action program to remove or treat in place any hazardous constituents pursuant to Section 724.193 that exceed concentration limits pursuant to Section 724.194 in groundwater, as follows:
- 1) At the following locations:
- A) Between the compliance point pursuant to Section 724.195 and the downgradient facility property boundary; and
- B) Beyond the facility boundary, where necessary to adequately protect human health and the environment, unless the owner or operator demonstrates to the Agency that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner and operator are not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where off-site access is denied. On-site measures to address such releases will be determined on a case-by-case basis.
 - 2) The permit will specify the following measures to be taken:

- A) Corrective action measures pursuant to this subsection (e) must be initiated and completed within a reasonable period of time considering the extent of contamination.
- B) Corrective action measures pursuant to this subsection (e) may be terminated once the concentration of hazardous constituents pursuant to Section 724.193 is reduced to levels below their respective concentration limits pursuant to Section 724.194.
- f) The owner or operator must continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater protection standard is not exceeded. If the owner or operator is conducting corrective action at the end of the compliance period, the owner or operator must continue that corrective action for as long as necessary to achieve compliance with the groundwater protection standard. The owner or operator may terminate corrective action measures taken beyond the period equal to the active life of the waste management area (including the closure period) if the owner or operator can demonstrate, based on data from the groundwater monitoring program pursuant to subsection (d) of this Section, that the groundwater protection standard of Section 724.192 has not been exceeded for a period of three consecutive years.
- g) The owner or operator must report in writing to the Agency on the effectiveness of the corrective action program. The owner or operator must submit these reports semi annually annually.
- h) If the owner or operator determines that the corrective action program no longer satisfies this Section, the owner or operator must, within 90 days, submit an application for a permit modification to make any appropriate changes to the program.

(Source:	Amended	at	32	Ill.	Reg.	<pre>—, effective ———</pre>)
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SUBPART G: CLOSURE AND POST-CLOSURE CARE

Section 724.213 Closure; Time Allowed for Closure

- a) All permits must require that, within 90 days after receiving the final volume of hazardous waste, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e) of this Section, at a hazardous waste management unit or facility, the owner or operator treat, remove from the unit or facility, or dispose of onsite, all hazardous wastes in accordance with the approved closure plan, unless the owner or operator makes the following demonstration by way of permit application or modification application. The Agency must approve a longer period if the owner or operator demonstrates that the following is true:
 - 1) Either of the following:
- A) The activities required to comply with this subsection (a) will, of necessity, take longer than 90 days to complete; or
 - B) All of the following is true:
- i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-

hazardous wastes, if the owner or operator complies with subsections (d) and (e) of this Section;

- ii) There is a reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or facility within one year; and
- iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2) The owner or operator has taken and will continue to take all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements.
- b) All permits must require that the owner or operator complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all applicable requirements in subsections (d) and (e) of this Section, at the hazardous waste management unit or facility, unless the owner or operator makes the following demonstration by way of permit application or modification application. The Agency must approve a longer closure period if the owner or operator demonstrates as follows:
 - 1) Either of the following:
- A) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or
- B) All of the following:
- i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes, if the owner or operator complies with subsections (d) and (e) of this Section;
- ii) There is reasonable likelihood that the owner or operator will recommence operation of the hazardous waste management unit or facility within one year;
- iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2) The owner and operator have taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility including compliance with all applicable permit requirements.
- c) The demonstration referred to in subsections (a)(1) and (b)(1) of this Section must be made as follows:
- 1) The demonstration in subsection (a)(1) of this Section must be made at least 30 days prior to the expiration of the 90-day period in subsection (a) of this Section; and
- 2) The demonstration in subsection (b)(1) of this Section must be made at least 30 days prior to the expiration of the 180-day period in subsection (b) of

this Section, unless the owner or operator is otherwise subject to deadlines in subsection (d) of this Section.

- d) Continued receipt of non-hazardous waste. The Agency must permit an owner or operator to receive only non-hazardous wastes in a landfill, land treatment unit, or surface impoundment unit after the final receipt of hazardous wastes at that unit if the following is true:
- 1) The owner or operator requests a permit modification in compliance with all applicable requirements in 35 Ill. Adm. Code 702, 703, and 705, and in the permit modification request demonstrates the following:
- A) That the unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes;
- B) That there is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes;
- C) That the non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility pursuant to this Part;
- D) That closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and
- E) That the owner or operator is operating and will continue to operate in compliance with all applicable permit requirements;
- 2) The request to modify the permit includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required pursuant to 35 Ill. Adm. Code 703.186, and closure and post-closure plans and updated cost estimates and demonstrations of financial assurance for closure and post-closure care, as necessary and appropriate, to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable pursuant to Section 724.212(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes;
- 3) The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and
- 4) The request to modify the permit and the demonstrations referred to in subsections (d)(1) and (d)(2) of this Section are submitted to the Agency no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit or no later than 90 days after the effective date of this Section, whichever is later.
- e) Surface impoundments. In addition to the requirements in subsection (d) of this Section, an owner or operator of a hazardous waste surface impoundment that is not in compliance with the liner and leachate collection system requirements in Section 724.321(c), (d), or (e) must receive non-hazardous wastes only as authorized by an adjusted standard pursuant to this subsection (e).

- 1) The petition for adjusted standard must include the following:
 - A) A plan for removing hazardous wastes; and
 - B) A contingent corrective measures plan.
- 2) The removal plan must provide for the following:
 - A) Removing all hazardous liquids; and
- B) Removing all hazardous sludges to the extent practicable without impairing the integrity of the liner or liners, if any; and
- C) Removal of hazardous wastes no later than 90 days after the final receipt of hazardous wastes. The Board will allow a longer time, if the owner or operator demonstrates the following:
- i) That the removal of hazardous wastes will, of necessity, take longer than the allotted period to complete; and
- ii) That an extension will not pose a threat to human health and the environment.
- 3) The following requirements apply to the contingent corrective measures plan:
- A) It must meet the requirements of a corrective action plan pursuant to Section 724.199, based upon the assumption that a release has been detected from the unit.
- B) It may be a portion of a corrective action plan previously submitted pursuant to Section 724.199.
- C) It may provide for continued receipt of non-hazardous wastes at the unit following a release only if the owner or operator demonstrates that continued receipt of wastes will not impede corrective action.
- D) It must provide for implementation within one year after a release, or within one year after the grant of the adjusted standard, whichever is later.
- 4) Definition of "release." A release is defined as a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit, or over the facility's groundwater protection standard at the or over the facility's groundwater protection standard at the point of compliance, if applicable, detected in accordance with the requirements in Subpart F of this Part.
- 5) In the event of a release, the owner or operator of the unit must do the following:
- A) Within 35 days, the owner or operator must file with the Board a petition for adjusted standard. If the Board finds that it is necessary to do so in order to adequately protect human health and the environment, the Board will modify the adjusted standard to require the owner or operator to fulfill the conditions of subsections (e)(5)(A)(i) and (e)(5)(A)(ii) of this Section. The Board will retain jurisdiction or condition the adjusted standard so as to

require the filing of a new petition to address any required closure pursuant to subsection (e)(7) of this Section.

- i) Begin to implement that corrective measures plan in less than one year; or
- ii) Cease the receipt of wastes until the plan has been implemented.
- B) The owner or operator must implement the contingent corrective measures plan.
- C) The owner or operator may continue to receive wastes at the unit if authorized by the approved contingent measures plan.
- 6) Semi-annual Annual report. During the period of corrective action, the owner or operator must provide semi-annual annual reports to the Agency that do the following:
- A) Describe They must describe the progress of the corrective action program;
 - B) Compile They must compile all groundwater monitoring data; and
- C) Evaluate—They must evaluate the effect of the continued receipt of non-hazardous wastes on the effectiveness of the corrective action.
- 7) Required closure. The owner or operator must commence closure of the unit in accordance with the closure plan and the requirements of this Part if the Board terminates the adjusted standard, or if the adjusted standard terminates pursuant to its terms.
- A) The Board will terminate the adjusted standard if the owner or operator failed to implement corrective action measures in accordance with the approved contingent corrective measures plan.
- B) The Board will terminate the adjusted standard if the owner or operator fails to make substantial progress in implementing the corrective measures plan and achieving the facility's groundwater protection standard, or background levels if the facility has not yet established a groundwater protection standard.
- C) The adjusted standard will automatically terminate if the owner or operator fails to implement the removal plan.
- D) The adjusted standard will automatically terminate if the owner or operator fails to timely file a required petition for adjusted standard.
- 8) Adjusted standard procedures. The following procedures must be used in granting, modifying or terminating an adjusted standard pursuant to this subsection (e).
- A) Except as otherwise provided, the owner or operator must follow the procedures of Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104 to petition the Board for an adjusted standard.
- B) Initial justification. The Board will grant an adjusted standard pursuant to subsection (e)(1) of this Section if the owner or operator demonstrates that

the removal plan and contingent corrective measures plans meet the requirements of subsections (e)(2) and (e)(3) of this Section.

- C) The Board will include the following conditions in granting an adjusted standard pursuant to subsection (e)(1) of this Section:
 - i) A plan for removing hazardous wastes.
- ii) A requirement that the owner or operator remove hazardous wastes in accordance with the plan.
 - iii) A contingent corrective measures plan.
- iv) A requirement that, in the event of a release, the owner or operator must do as follows: within 35 days, file with the Board a petition for adjusted standard; implement the corrective measures plan; and, file semi-annual reports with the Agency.
- v) A condition that the adjusted standard will terminate if the owner or operator fails to do as follows: implement the removal plan; or timely file a required petition for adjusted standard.
- vi) A requirement that, in the event the adjusted standard is terminated, the owner or operator must commence closure of the unit in accordance with the requirements of the closure plan and this Part.
- D) Justification in the event of a release. The Board will modify or terminate the adjusted standard pursuant to a petition filed pursuant to subsection (e)(5)(A) of this Section, as provided in that subsection or in subsection (e)(7) of this Section.
- 9) The Agency must modify the RCRA permit to include the adjusted standard.
- 10) The owner or operator may file a permit modification application with a revised closure plan within 15 days after an adjusted standard is terminated.

(Source:	Amended	at 32	Ill.	Reg.	_		effective	
Section	724.215	Ceri	cifica	ation	of	Closure	=	

Within 60 days after completion of closure of each hazardous waste surface impoundment, waste pile, land treatment, or landfill unit, and within 60 days after completion of final closure, the owner or operator must submit to the Agency, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan. The certification must be signed by the owner or operator and by an independent registered professional engineer a qualified Professional Engineer. Documentation supporting the independent registered professional engineer's Professional Engineer's certification must be furnished to the Agency upon request until the Agency releases the owner or operator from the financial assurance requirements for closure under Section 724.243(i).

(Source:	Amended	at	32	Ill.	Reg.	<u> </u>	effective	

Section 724.216 Survey Plat

No later than the submission of the certification of closure of each hazardous waste disposal unit, the owner or operator must submit to any local zoning authority or authority with jurisdiction over local land use and to the Agency and record with land titles, a survey plat indicating the location and dimensions of landfills landfill cells or other hazardous waste disposal units with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a professional land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction over local land use must contain a note, prominently displayed, that states the owner's and operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance with the applicable regulations of Subpart G of this Part.

(Source:	Amended a	at 3	32	Ill.	Reg.	 effective)

Section 724.220 Certification of Completion of Post-Closure Care

No later than 60 days after completion of the established post-closure care period for each hazardous waste disposal unit, the owner or operator must submit to the Agency, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer—a qualified Professional Engineer. Documentation supporting the independent registered professional engineer's Professional Engineer's certification must be furnished to the Agency upon request until the Agency releases the owner or operator from the financial assurance requirements for post-closure care under Section 724.245(i).

(Source:	Amended	at	32	Ill.	Reg.	, effectiv	·e
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SUBPART H: FINANCIAL REQUIREMENTS

Section 724.240 Applicability

- a) The requirements of Sections 724.242, 724.243, and 724.247 through 724.251 apply to owners and operators of all hazardous waste facilities, except as provided otherwise in this Section or in Section 724.101.
- b) The requirements of Sections 724.244 and 724.245 apply only to owners and operators of the following:
- 1) Disposal facilities;
- 2) Piles, and surface impoundments from which the owner or operator intends to remove the wastes at closure, to the extent that Sections 724.244 and 724.245 are made applicable to such facilities in Sections 724.328 and 724.358;
- 3) Tank systems that are required pursuant to Section 724.297 to meet the requirements for landfills; or
- 4) Containment buildings that are required pursuant to Section 724.1102 to meet the requirements for landfills.
- c) The State and the federal government are exempt from the requirements of this Subpart H.

- d) A permit or enforceable document can contain alternative requirements that replace all or part of the financial assurance requirements of this Subpart H applying to a regulated unit, as provided in 35 Ill. Adm. Code 703.161, where the Board or Agency has done the following:
- 1) The Board or Agency has established alternative requirements for the regulated unit established pursuant to Section 724.190(f) or 724.210($\frac{d}{2}$) and
- 2) The Board or Agency determines that it is not necessary to apply the financial assurance requirements of this Subpart H because the alternative financial assurance requirements will adequately protect human health and the environment.

(Source:	Amended	at	32	Ill.	Reg.	 effective	

Section 724.243 Financial Assurance for Closure

An owner or operator of each facility must establish financial assurance for closure of the facility. The owner or operator must choose from the options that are specified in subsections (a) through (f) of this Section.

- a) Closure trust fund.
- 1) An owner or operator may satisfy the requirements of this Section by establishing a closure trust fund that conforms to the requirements of this subsection (a) and submitting an original signed duplicate of the trust agreement to the Agency. An owner or operator of a new facility must submit the original signed duplicate of the trust agreement to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage or disposal. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.
- 2) The wording of the trust agreement must be that specified in Section 724.251 and the trust agreement must be accompanied by a formal certification of acknowledgment (as specified in Section 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current closure cost estimate covered by the agreement.
- 3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the closure trust fund must be made as follows:
- A) For a new facility, the first payment must be made before the initial receipt of hazardous waste for treatment, storage, or disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Agency before this initial receipt of hazardous waste. The first payment must be at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by the following formula:

Where:

CE = the current closure cost <u>estimateCV estimateCV</u> = the current value of the trust <u>fundY fundY</u> = the number of years remaining in the pay-in period.

B) If an owner or operator establishes a trust fund as specified in 35 Ill. Adm. Code 725.243(a) and the value of that trust fund is less than the current closure cost estimate when a permit is awarded for the facility, the amount of the current closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subsection (a)(3) of this Section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to 35 Ill. Adm. Code 725. The amount of each payment must be determined by the following formula:

Next Payment =

Where:

CE = the current closure cost <u>estimateCV estimateCV</u> = the current value of the trust <u>fundY fundY</u> = the number of years remaining in the pay-in period.

- 4) The owner or operator may accelerate payments into the trust fund or may deposit the full amount of the current closure cost estimate at the time the fund is established. However, the owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.
- 5) If the owner or operator establishes a closure trust fund after having used one or more alternate mechanisms specified in this Section or in 35 Ill. Adm. Code 725.243, its first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual payments made according to specifications of this subsection (a) and 35 Ill. Adm. Code 725.243, as applicable.
- 6) After the pay-in period is completed, whenever the current closure cost estimate changes, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current closure cost estimate or obtain other financial assurance as specified in this Section to cover the difference.
- 7) If the value of the trust fund is greater than the total amount of the current closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate.
- 8) If an owner or operator substitutes other financial assurance, as specified in this Section for all or part of the trust fund, it may submit a written request to the Agency for release of the amount in excess of the current closure cost estimate covered by the trust fund.
- 9) Within 60 days after receiving a request from the owner or operator for release of funds as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.

- After beginning partial or final closure, an owner or operator or another person authorized to conduct partial or final closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursement for partial closure only if sufficient funds are remaining in the trust fund to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for partial or final closure activities, the Agency must instruct the trustee to make reimbursement in those amounts as the Agency specifies in writing if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan, or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the value of the trust fund, it must withhold reimbursement of such amounts as it deems prudent until it determines, in accordance with subsection (i) of this Section, that the owner or operator is no longer required to maintain financial assurance for final closure of the facility. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- 11) The Agency must agree to termination of the trust when either of the following occurs:
- A) An owner or operator substitutes alternate financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i).
- b) Surety bond guaranteeing payment into a closure trust fund.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of <u>the Treasury updates Circular 570</u>, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- 3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section except as follows:
- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and

- B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
- i) Payments into the trust fund as specified in subsection (a) of this Section;
- ii) Updating of Schedule A of the trust agreement (see 35 Ill. Adm. Code 724.251) to show current closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do one of the following:
- A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;
- B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin final closure is issued by the Board or a U.S. district court or other court of competent jurisdiction; or
- C) Provide alternate financial assurance as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.
- 6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section.
- 7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidence-evidenced by the return receipts.
- 9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternate financial assurance as specified in this Section.
- c) Surety bond guaranteeing performance of closure.

1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (c) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of <u>the</u> Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- 3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust must meet the requirements specified in subsection (a) of this Section, except as follows:
- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
- B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
- i) Payments into the trust fund, as specified in subsection (a) of this Section;
- ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do the following:
- A) Perform final closure in accordance with the closure plan and other requirements of the permit for the facility whenever required to do so; or
- B) Provide alternative financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the approved closure plan and other permit requirements when required to do so,

under the terms of the bond the surety will perform final closure, as guaranteed by the bond, or will deposit the amount of the penal sum into the standby trust fund.

- 6) The penal sum of the bond must be in an amount at least equal to the current closure cost estimate.
- 7) Whenever the current closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance as specified in this Section. Whenever the current closure cost estimate decreases, the penal sum may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- 9) The owner or operator may cancel the bond if the Agency has given prior written consent. The Agency must provide such written consent when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- 10) The surety must not be liable for deficiencies in the performance of closure by the owner or operator after the Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- d) Closure letter of credit.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (d) and submitting the letter to the Agency. An owner or operator of a new facility must submit the letter of credit to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.
- 2) The wording of the letter of credit must be that specified in Section 724.251.
- 3) An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby

trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:

- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and
- B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations.
- i) Payments into the trust fund, as specified in subsection (a) of this Section;
- ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The letter or credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name and address of the facility, and the amount of funds assured for closure of the facility by the letter of credit.
- 5) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120 days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.
- 6) The letter of credit must be issued in an amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section.
- 7) Whenever the current closure cost estimate increases to an amount greater than the amount of the credit, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current closure cost estimate decreases, the amount of the credit may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 8) Following a final judicial determination or Board order finding that the owner or operator has failed to perform final closure in accordance with the closure plan and other permit requirements when required to do so, the Agency may draw on the letter of credit.
- 9) If the owner or operator does not establish alternative financial assurance, as specified in this Section, and obtain written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from issuing institution that it

has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternative financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.

- 10) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- e) Closure insurance.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining closure insurance that conforms to the requirements of this subsection (e) and submitting a certificate of such insurance to the Agency. An owner or operator of a new facility must submit the certificate of insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more States.
- 2) The wording of the certificate of insurance must be that specified in Section 724.251.
- 3) The closure insurance policy must be issued for a face amount at least equal to the current closure cost estimate, except as provided in subsection (g) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
- 4) The closure insurance policy must guarantee that funds will be available to close the facility whenever final closure occurs. The policy must also guarantee that, once final closure begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties, as the Agency specifies.
- 5) After beginning partial or final closure, an owner or operator or any other person authorized to conduct closure may request reimbursement for closure expenditures by submitting itemized bills to the Agency. The owner or operator may request reimbursements for partial closure only if the remaining value of the policy is sufficient to cover the maximum costs of closing the facility over its remaining operating life. Within 60 days after receiving bills for closure activities, the Agency must instruct the insurer to make reimbursement in such amounts, as the Agency specifies in writing, if the Agency determines that the partial or final closure expenditures are in accordance with the approved closure plan or otherwise justified. If the Agency determines that the maximum cost of closure over the remaining life of the facility will be significantly greater than the face amount of the policy, it must withhold reimbursement of

such amounts that it deems prudent, until it determines, in accordance with subsection (i) of this Section, that the owner or operator is no longer required to maintain financial assurance for closure of the facility. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.

- 6) The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator, as specified in subsection (e)(10) of this Section. Failure to pay the premium, without substitution of alternative financial assurance, as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- 7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- 8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts. Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect, in the event that on or before the date of expiration one of the following occurs:
- A) The Agency deems the facility abandoned;
- B) The permit is terminated or revoked or a new permit is denied;
- C) Closure is ordered by the Board or a U.S. district court or other court of competent jurisdiction;
- D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or
- E) The premium due is paid.
- 9) Whenever the current closure cost estimate increases to an amount greater than the face amount of the policy, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section to cover the increase. Whenever the current closure cost estimate decreases, the face amount may be reduced to the amount of the current closure cost estimate following written approval by the Agency.
- 10) The Agency must give written consent to the owner or operator that it may terminate the insurance policy when either of the following occurs:

- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- f) Financial test and corporate guarantee for closure.
- 1) An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test, as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of either subsection (f)(1)(A) or (f)(1)(B) of this Section:
- A) The owner or operator must have the following:
- i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;
- ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates; and the current plugging and abandonment cost estimates;
- iii) Tangible net worth of at least \$10 million; and
- iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- B) The owner or operator must have the following:
- i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;
- ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
- iii) Tangible net worth of at least \$10 million; and
- iv) Assets located in the United States amounting to at least 90 percent of total assets or at least six times the sum of the current closure and post-closure estimates and the current plugging and abandonment cost estimates.
- 2) The phrase "current closure and post-closure cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1-4 of the letter from the owner's or operator's chief financial officer (see Section 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1-4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 704.240).
- 3) To demonstrate that it meets this test, the owner or operator must submit the following items to the Agency:

- A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251; and
- B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
- C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
- i) That the accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
- ii) In connection with that procedure, that no matters came to the accountant's attention which caused the accountant to believe that the specified data should be adjusted.
- 4) An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.
- 5) After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section the owner or operator must send notice to the Agency of intent to establish alternative financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements. The owner or operator must provide the alternative financial assurance within 120 days after the end of such fiscal year.
- 7) The Agency may, based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (f)(1) of this Section, require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (f)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of such a finding.
- 8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of the disallowance.
- 9) The owner or operator is no longer required to submit the items specified in subsection (f)(3) of this Section when either of the following occurs:

- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- An owner or operator may meet the requirements of this Section by obtaining a written quarantee, hereafter referred to as "corporate quarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (f)(1) through (f)(8) of this Section, must comply with the terms of the corporate guarantee, and the wording of the corporate guarantee must be that specified in Section 724.251. The certified copy of the corporate guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:
- A) If the owner or operator fails to perform final closure of a facility covered by the corporate guarantee in accordance with the closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund, as specified in subsection (a) of this Section, in the name of the owner or operator.
- B) The corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- C) If the owner or operator fails to provide alternative financial assurance as specified in this Section and obtain the written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.
- g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit, and insurance. The mechanisms must be as specified in subsections (a), (b), (d), and (e) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more

mechanisms. The Agency may use any or all of the mechanisms to provide for closure of the facility.

- h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for closure of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.
- i) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and anindependent registered problem in languages a qualified Professional Engineer that final approved closure has been accomplished in accordance with the closure plan, the Agency must notify the owner or operator in writing that it is no longer required by this Section to maintain financial assurance for closure of the facility, unless the Agency determines that closure has not been in accordance with the approved closure plan. The Agency must provide the owner or operator a detailed written statement of any such determination that closure has not been in accordance with the approved closure plan.
- j) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):
- 1) An increase in, or a refusal to decrease the amount of, a bond, letter of credit, or insurance;
- 2) Requiring alternative assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source:	Amended	at	32	Ill.	Reg.		effective)
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Section 724.245 Financial Assurance for Post-Closure Care

An owner or operator of a hazardous waste management unit subject to the requirements of Section 724.244 must establish financial assurance for post-closure care in accordance with the approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste or the effective date of the regulation, whichever is later. The owner or operator must choose from among the following options:

- a) Post-closure trust fund.
- 1) An owner or operator may satisfy the requirements of this Section by establishing a post-closure trust fund that conforms to the requirements of this subsection (a) and submitting an original, signed duplicate of the trust agreement to the Agency. An owner or operator of a new facility must submit the original, signed duplicate of the trust agreement to the Agency at least 60 days

before the date on which hazardous waste is first received for disposal. The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or State agency.

- 2) The wording of the trust agreement must be that specified in Section 724.251 and the trust agreement accompanied by a formal certification of acknowledgment (as specified in Section 724.251). Schedule A of the trust agreement must be updated within 60 days after a change in the amount of the current post-closure cost estimate covered by the agreement.
- 3) Payments into the trust fund must be made annually by the owner or operator over the term of the initial RCRA permit or over the remaining operating life of the facility as estimated in the closure plan, whichever period is shorter; this period is hereafter referred to as the "pay-in period." The payments into the post-closure trust fund must be made as follows:
- A) For a new facility, the first payment must be made before the initial receipt of hazardous waste for disposal. A receipt from the trustee for this payment must be submitted by the owner or operator to the Agency before this initial receipt of hazardous waste. The first payment must be at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section, divided by the number of years in the pay-in period. Subsequent payments must be made no later than 30 days after each anniversary date of the first payment. The amount of each subsequent payment must be determined by the following formula:

Next Payment =

Where:

CE = the current closure cost estimateCV estimateCV = the current value of the trust fundY fundY = the number of years remaining in the pay-in period.

B) If an owner or operator establishes a trust fund, as specified in 35 Ill. Adm. Code 725.245(a), and the value of that trust fund is less than the current post-closure cost estimate when a permit is awarded for the facility, the amount of the current post-closure cost estimate still to be paid into the trust fund must be paid in over the pay-in period as defined in subsection (a)(3) of this Section. Payments must continue to be made no later than 30 days after each anniversary date of the first payment made pursuant to 35 Ill. Adm. Code 725. The amount of each payment must be determined by the following formula:

Next Payment =

Where:

- CE = the current closure cost $\frac{\text{estimateCV}}{\text{estimateCV}}$ the current value of the trust $\frac{\text{fundY}}{\text{fundY}}$ the number of years remaining in the pay-in period.
- 4) The owner or operator may accelerate payments into the trust fund or owner or operator must maintain the value of the fund at no less than the value that the fund would have if annual payments were made as specified in subsection (a)(3) of this Section.
- 5) If the owner or operator establishes a post-closure trust fund after having used one or more alternative mechanisms specified in this Section or in 35 Ill. Adm. Code 725.245, its first payment must be in at least the amount that the fund would contain if the trust fund were established initially and annual

payments made according to specifications of this subsection (a) and 35 Ill. Adm. Code 725.245, as applicable.

- 6) After the pay-in period is completed, whenever the current post-closure cost estimate changes during the operating life of the facility, the owner or operator must compare the new estimate with the trustee's most recent annual valuation of the trust fund. If the value of the fund is less than the amount of the new estimate, the owner or operator, within 60 days after the change in the cost estimate, must either deposit an amount into the fund so that its value after this deposit at least equals the amount of the current post-closure cost estimate, or obtain other financial assurance, as specified in this Section, to cover the difference.
- 7) During the operating life of the facility, if the value of the trust fund is greater than the total amount of the current post-closure cost estimate, the owner or operator may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate.
- 8) If an owner or operator substitutes other financial assurance as specified in this Section for all or part of the trust fund, it may submit a written request to the Agency for release of the amount in excess of the current post-closure cost estimate covered by the trust fund.
- 9) Within 60 days after receiving a request from the owner or operator for release of funds, as specified in subsection (a)(7) or (a)(8) of this Section, the Agency must instruct the trustee to release to the owner or operator such funds as the Agency specifies in writing.
- 10) During the period of post-closure care, the Agency must approve a release of funds if the owner or operator demonstrates to the Agency that the value of the trust fund exceeds the remaining cost of post-closure care.
- 11) An owner or operator or any other person authorized to perform post-closure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the trustee to make requirements in those amounts that the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the trustee to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- 12) The Agency must agree to termination of the trust when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- b) Surety bond guaranteeing payment into a post-closure trust fund.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (b) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which

hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- 3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements specified in subsection (a) of this Section, except as follows:
- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
- B) Until the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
- i) Payments into the trust fund, as specified in subsection (a) of this Section;
- ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do one of the following:
- A) Fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility;
- B) Fund the standby trust fund in an amount equal to the penal sum within 15 days after an order to begin closure is issued by the Board or a U.S. district court or other court of competent jurisdiction; or
- C) Provide alternative financial assurance as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

- 6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section.
- 7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 8) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidence by the return receipts.
- 9) The owner or operator may cancel the bond if the Agency has given prior written consent based on its receipt of evidence of alternative financial assurance, as specified in this Section.
- c) Surety bond guaranteeing performance of post-closure care.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (c) and submitting the bond to the Agency. An owner or operator of a new facility must submit the bond to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The bond must be effective before this initial receipt of hazardous waste. The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on federal bonds in Circular 570 of the U.S. Department of the Treasury.

BOARD NOTE: The U.S. Department of Treasury updates Circular 570, "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies," on an annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the Internet from the following website: http://www.fms.treas.gov/c570/.

- 2) The wording of the surety bond must be that specified in Section 724.251.
- 3) The owner or operator who uses a surety bond to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the bond, all payments made thereunder will be deposited by the surety directly into the standby trust fund in accordance with instructions from the Agency. This standby trust must meet the requirements specified in subsection (a) of this Section, except as follows:
- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the surety bond; and
- B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required:
- i) Payments into the trust fund, as specified in subsection (a) of this Section;

- ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The bond must guarantee that the owner or operator will do either of the following:
- A) Perform final post-closure care in accordance with the post-closure plan and other requirements of the permit for the facility; or
- B) Provide alternative financial assurance, as specified in this Section, and obtain the Agency's written approval of the assurance provided, within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the bond from the surety.
- 5) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, under the terms of the bond the surety will perform post-closure care in accordance with post-closure plan and other permit requirements or will deposit the amount of the penal sum into the standby trust fund.
- 6) The penal sum of the bond must be in an amount at least equal to the current post-closure cost estimate.
- 7) Whenever the current post-closure cost estimate increases to an amount greater than the penal sum during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the penal sum to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance, as specified in this Section. Whenever the current closure cost estimate decreases during the operating life of the facility, the penal sum may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 8) During the period of post-closure care, the Agency must approve a decrease in the penal sum if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.
- 9) Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- 10) The owner or operator may cancel the bond if the Agency has given prior written consent. The Agency must provide such written consent when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance as specified in this Section; or

- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- 11) The surety will not be liable for deficiencies in the performance of postclosure care by the owner or operator after the Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- d) Post-closure letter of credit.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (d) and submitting the letter to the Agency. An owner or operator of a new facility must submit the letter of credit to the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The letter of credit must be effective before this initial receipt of hazardous waste. The issuing institution must be an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or State agency.
- 2) The wording of the letter of credit must be that specified in Section 724.251.
- 3) An owner or operator who uses a letter of credit to satisfy the requirements of this Section must also establish a standby trust fund. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Agency must be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Agency. This standby trust fund must meet the requirements of the trust fund specified in subsection (a) of this Section, except as follows:
- A) An original, signed duplicate of the trust agreement must be submitted to the Agency with the letter of credit; and
- B) Unless the standby trust fund is funded pursuant to the requirements of this Section, the following are not required by these regulations:
- i) Payments into the trust fund, as specified in subsection (a) of this Section;
- ii) Updating of Schedule A of the trust agreement (as specified in Section 724.251) to show current post-closure cost estimates;
- iii) Annual valuations, as required by the trust agreement; and
- iv) Notices of nonpayment, as required by the trust agreement.
- 4) The letter or credit must be accompanied by a letter from the owner or operator referring to the letter of credit by number, issuing institution, and date and providing the following information: the USEPA identification number, name and address of the facility, and the amount of funds assured for post-closure care of the facility by the letter of credit.
- 5) The letter of credit must be irrevocable and issued for a period of at least one year. The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless, at least 120

days before the current expiration date, the issuing institution notifies both the owner or operator and the Agency by certified mail of a decision not to extend the expiration date. Under the terms of the letter of credit, the 120 days will begin on the date when both the owner or operator and the Agency have received the notice, as evidenced by the return receipts.

- 6) The letter of credit must be issued in an amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section.
- 7) Whenever the current post-closure cost estimate increases to an amount greater than the amount of the credit during the operating life of the facility, the owner or operator, within 60 days after the increase, must either cause the amount of the credit to be increased so that it at least equals the current post-closure cost estimate and submit evidence of such increase to the Agency, or obtain other financial assurance as specified in this Section to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the amount of the credit may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 8) During the period of post-closure care, the Agency must approve a decrease in the amount of the letter of credit if the owner or operator demonstrates to the Agency that the amount exceeds the remaining cost of post-closure care.
- 9) Following a final judicial determination or Board order finding that the owner or operator has failed to perform post-closure care in accordance with the approved post-closure plan and other permit requirements, the Agency may draw on the letter of credit.
- 10) If the owner or operator does not establish alternative financial assurance, as specified in this Section, and obtain written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice from the issuing institution that it has decided not to extend the letter of credit beyond the current expiration date, the Agency must draw on the letter of credit. The Agency may delay the drawing if the issuing institution grants an extension of the term of the credit. During the last 30 days of any such extension the Agency must draw on the letter of credit if the owner or operator has failed to provide alternative financial assurance, as specified in this Section, and obtain written approval of such assurance from the Agency.
- 11) The Agency must return the letter of credit to the issuing institution for termination when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- e) Post-closure insurance.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining post-closure insurance that conforms to the requirements of this subsection (e) and submitting a certificate of such insurance to the Agency. An owner or operator of a new facility must submit the certificate of insurance to

the Agency at least 60 days before the date on which hazardous waste is first received for disposal. The insurance must be effective before this initial receipt of hazardous waste. At a minimum, the insurer must be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more states.

- 2) The wording of the certificate of insurance must be that specified in Section 724.251.
- 3) The post-closure insurance policy must be issued for a face amount at least equal to the current post-closure cost estimate, except as provided in subsection (g) of this Section. The term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.
- 4) The post-closure insurance policy must guarantee that funds will be available to provide post-closure care of facility whenever the post-closure period begins. The policy must also guarantee that, once post-closure care begins, the insurer will be responsible for paying out funds, up to an amount equal to the face amount of the policy, upon the direction of the Agency to such party or parties as the Agency specifies.
- 5) An owner or operator or any other person authorized to perform postclosure care may request reimbursement for post-closure care expenditures by submitting itemized bills to the Agency. Within 60 days after receiving bills for post-closure activities, the Agency must instruct the insurer to make reimbursement in such amounts as the Agency specifies in writing if the Agency determines that the post-closure care expenditures are in accordance with the approved post-closure plan or otherwise justified. If the Agency does not instruct the insurer to make such reimbursements, the Agency must provide the owner or operator with a detailed written statement of reasons.
- 6) The owner or operator must maintain the policy in full force and effect until the Agency consents to termination of the policy by the owner or operator as specified in subsection (e)(11) of this Section. Failure to pay the premium, without substitution of alternative financial assurance as specified in this Section, will constitute a significant violation of these regulations, warranting such remedy as the Board may impose pursuant to the Environmental Protection Act [415 ILCS 5]. Such violation will be deemed to begin upon receipt by the Agency of a notice of future cancellation, termination, or failure to renew due to nonpayment of the premium, rather than upon the date of expiration.
- 7) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator. Such assignment may be conditional upon consent of the insurer, provided such consent is not unreasonably refused.
- 8) The policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. The automatic renewal of the policy must, at a minimum, provide the insured with the option of renewal at the face amount of the expiring policy. If there is a failure to pay the premium, the insurer may elect to cancel, terminate, or fail to renew the policy by sending notice by certified mail to the owner or operator and the Agency. Cancellation, termination, or failure to renew may not occur, however, during the 120 days beginning with the date of receipt of the notice by both the Agency and the owner or operator, as evidenced by the return receipts.

Cancellation, termination, or failure to renew may not occur, and the policy will remain in full force and effect, in the event that on or before the date of expiration one of the following occurs:

- A) The Agency deems the facility abandoned;
- B) The permit is terminated or revoked or a new permit is denied;
- C) Closure is ordered by the Board or a U.S. district court or other court of competent jurisdiction;
- D) The owner or operator is named as debtor in a voluntary or involuntary proceeding under 11 USC (Bankruptcy); or
- E) The premium due is paid.
- 9) Whenever the current post-closure cost estimate increases to an amount greater than the face amount of the policy during the life of the facility, the owner or operator, within 60 days after the increase, must either cause the face amount to be increased to an amount at least equal to the current post-closure cost estimate and submit evidence of such increase to the Agency or obtain other financial assurance, as specified in this Section, to cover the increase. Whenever the current post-closure cost estimate decreases during the operating life of the facility, the face amount may be reduced to the amount of the current post-closure cost estimate following written approval by the Agency.
- 10) Commencing on the date that liability to make payments pursuant to the policy accrues, the insurer must thereafter annually increase the face amount of the policy. Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.
- 11) The Agency must give written consent to the owner or operator that the owner or operator may terminate the insurance policy when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- f) Financial test and corporate guarantee for post-closure care.
- 1) An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of either subsection (f)(1)(A) or (f)(1)(B) of this Section:
- A) The owner or operator must have the following:
- i) Two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

- ii) Net working capital and tangible net worth each at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates;
- iii) Tangible net worth of at least \$10 million; and
- iv) Assets in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- B) The owner or operator must have the following:
- i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;
- ii) Tangible net worth at least six times the sum of the current closure and post-closure cost estimates and current plugging and abandonment cost estimates;
- iii) Tangible net worth of at least \$10 million; and
- iv) Assets located in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post-closure cost estimates and the current plugging and abandonment cost estimates.
- 2) The phrase "current closure and post-closure cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see Section 724.251). The phrase "current plugging and abandonment cost estimates," as used in subsection (f)(1) of this Section, refers to the cost estimates required to be shown in subsections 1 through 4 of the letter from the owner's or operator's chief financial officer (see 35 Ill. Adm. Code 704.240).
- 3) To demonstrate that it meets this test, the owner or operator must submit the following items to the Agency:
- A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251;
- B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year; and
- C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
- i) The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
- ii) In connection with that procedure, no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.

- 4) An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for disposal.
- 5) After the initial submission of items specified in subsection (f)(3) of this Section, the owner or operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must send notice to the Agency of intent to establish alternative financial assurance, as specified in this Section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the requirements the owner or operator must provide the alternative financial assurance within 120 days after the end of such fiscal year.
- 7) Based on a reasonable belief that the owner or operator may no longer meet the requirements of subsection (f)(1) of this Section, the Agency may require reports of financial condition at any time from the owner or operator in addition to those specified in subsection (f)(3) of this Section. If the Agency finds, on the basis of such reports or other information, that the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of such a finding.
- 8) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide alternative financial assurance, as specified in this Section, within 30 days after notification of the disallowance.
- 9) During the period of post-closure care, the Agency must approve a decrease in the current post-closure cost estimate for which this test demonstrates financial assurance if the owner or operator demonstrates to the Agency that the amount of the cost estimate exceeds the remaining cost of post-closure care.
- 10) The owner or operator is no longer required to submit the items specified in subsection (f)(3) of this Section when either of the following occurs:
- A) An owner or operator substitutes alternative financial assurance, as specified in this Section; or
- B) The Agency releases the owner or operator from the requirements of this Section in accordance with subsection (i) of this Section.
- 11) An owner or operator may meet the requirements of this Section by obtaining a written guarantee, hereafter referred to as "corporate guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial business relationship" with the owner or operator. The guarantor must meet the requirements for owners or operators in subsections (f)(1) through (f)(9), and must comply with the terms

of the corporate guarantee. The wording of the corporate guarantee must be that specified in Section 724.251. A certified copy of the corporate guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the corporate guarantee must provide as follows:

- A) That if the owner or operator fails to perform post-closure care of a facility covered by the corporate guarantee in accordance with the post-closure plan and other permit requirements whenever required to do so, the guarantor will do so or establish a trust fund as specified in subsection (a) of this Section in the name of the owner or operator.
- B) That the corporate guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner or operator and the Agency, as evidenced by the return receipts.
- C) That if the owner or operator fails to provide alternative financial assurance as specified in this Section and obtain the written approval of such alternative assurance from the Agency within 90 days after receipt by both the owner or operator and the Agency of a notice of cancellation of the corporate guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the owner or operator.
- g) Use of multiple financial mechanisms. An owner or operator may satisfy the requirements of this Section by establishing more than one financial mechanism per facility. These mechanisms are limited to trust funds, surety bonds guaranteeing payment into a trust fund, letters of credit and insurance. The mechanisms must be as specified in subsections (a), (b), (d), and (e) of this Section, respectively, except that it is the combination of mechanisms, rather than the single mechanism, that must provide financial assurance for an amount at least equal to the current post-closure cost estimate. If an owner or operator uses a trust fund in combination with a surety bond or a letter of credit, it may use the trust fund as the standby trust fund for the other mechanisms. A single standby trust fund may be established for two or more mechanisms. The Agency may use any or all of the mechanisms to provide for post-closure care of the facility.
- h) Use of a financial mechanism for multiple facilities. An owner or operator may use a financial assurance mechanism specified in this Section to meet the requirements of this Section for more than one facility. Evidence of financial assurance submitted to the Agency must include a list showing, for each facility, the USEPA identification number, name, address, and the amount of funds for post-closure care assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility. The amount of funds available to the Agency must be sufficient to close all of the owner or operator's facilities. In directing funds available through the mechanism for post-closure care of any of the facilities covered by the mechanism, the Agency may direct only the amount of funds

designated for that facility, unless the owner or operator agrees to the use of additional funds available under the mechanism.

- i) Release of the owner or operator from the requirements of this Section. Within 60 days after receiving certifications from the owner or operator and anindependent registered professional engineer—a qualified Professional Engineer that the post-closure care period has been completed for a hazardous waste disposal unit in accordance with the approved plan, the Agency must notify the owner or operator that it is no longer required to maintain financial assurance for post-closure care of that unit, unless the Agency determines that post-closure care has not been in accordance with the approved post-closure plan. The Agency must provide the owner or operator with—a detailed written statement of any such determination that post-closure care has not been in accordance with the approved post-closure plan.
- j) Appeal. The following Agency actions are deemed to be permit modifications or refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code 702.184(e)(3)):
- 1) An increase in or a refusal to decrease the amount of a bond, letter of credit, or insurance;
- 2) Requiring alternative assurance upon a finding that an owner or operator or parent corporation no longer meets a financial test.

(Source:	Amended at	32	Ill.	Reg.	 effective	

Liability Requirements

Section 724.247

- a) Coverage for sudden accidental occurrences. An owner or operator of a hazardous waste treatment, storage, or disposal facility, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by sudden accidental occurrences arising from operations of the facility or group of facilities. The owner or operator must have and maintain liability coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of at least \$2 million, exclusive of legal defense costs. This liability coverage may be demonstrated as specified in subsections (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), or (a)(6) of this Section:
- 1) An owner or operator may demonstrate the required liability coverage by having liability insurance, as specified in this subsection (a).
- A) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement and of the certificate of insurance must be that specified in Section 724.251. The wording of the certificate of insurance must be that specified in Section 724.251. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Agency. If requested by the Agency, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.

- B) Each insurance policy must be issued by an insurer that is licensed by the Illinois Department of Insurance.
- 2) An owner or operator may meet the requirements of this Section by passing a financial test or using the guarantee for liability coverage, as specified in subsections (f) and (g) of this Section.
- 3) An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage, as specified in subsection (h) of this Section.
- 4) An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage, as specified in subsection (i) of this Section.
- 5) An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage, as specified in subsection (j) of this Section.
- 6) An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through the use of a combination of financial assurances pursuant to this subsection (a), the owner or operator must specify at least one such assurance as "primary" coverage and must specify other such assurance as "excess" coverage.
- 7) An owner or operator must notify the Agency within 30 days whenever any of the following occurs:
- A) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in subsections (a)(1) through (a)(6) of this Section;
- B) A Certification of Valid Claim for bodily injury or property damages caused by sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage pursuant to subsections (a)(1) through (a)(6) of this Section; or
- C) A final court order establishing a judgement for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage pursuant to subsections (a)(1) through (a)(6) of this Section.
- b) Coverage for nonsudden accidental occurrences. An owner or operator of a surface impoundment, landfill, land treatment facility, or disposal miscellaneous unit that is used to manage hazardous waste, or a group of such facilities, must demonstrate financial responsibility for bodily injury and property damage to third parties caused by nonsudden accidental occurrences arising from operations of the facility or group of facilities. The owner or

operator must have and maintain liability coverage for nonsudden accidental occurrences in the amount of at least \$3 million per occurrence with an annual aggregate of at least \$6 million, exclusive of legal defense costs. An owner or operator meeting the requirements of this Section may combine the required peroccurrence coverage levels for sudden and nonsudden accidental occurrences into a single per-occurrence level, and combine the required annual aggregate coverage levels for sudden and nonsudden accidental occurrences into a single annual aggregate level. Owners or operators who combine coverage levels for sudden and nonsudden accidental occurrences must maintain liability coverage in the amount of at least \$4 million per occurrence and \$8 million annual aggregate. This liability coverage may be demonstrated as specified in subsections (b)(1), (b)(2), (b)(3), (b)(4), (b)(5), or (b)(6) of this Section:

- 1) An owner or operator may demonstrate the required liability coverage by having liability insurance, as specified in this subsection (b).
- A) Each insurance policy must be amended by attachment of the Hazardous Waste Facility Liability Endorsement or evidenced by a Certificate of Liability Insurance. The wording of the endorsement must be that specified in Section 724.251. The wording of the certificate of insurance must be that specified in Section 724.251. The owner or operator must submit a signed duplicate original of the endorsement or the certificate of insurance to the Agency. If requested by the Agency, the owner or operator must provide a signed duplicate original of the insurance policy. An owner or operator of a new facility must submit the signed duplicate original of the Hazardous Waste Facility Liability Endorsement or the Certificate of Liability Insurance to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal. The insurance must be effective before this initial receipt of hazardous waste.
- B) Each insurance policy must be issued by an insurer that is licensed by the Illinois Department of Insurance.
- 2) An owner or operator may meet the requirements of this Section by passing a financial test or using the guarantee for liability coverage, as specified in subsections (f) and (g) of this Section.
- 3) An owner or operator may meet the requirements of this Section by obtaining a letter of credit for liability coverage, as specified in subsection (h) of this Section.
- 4) An owner or operator may meet the requirements of this Section by obtaining a surety bond for liability coverage, as specified in subsection (i) of this Section.
- 5) An owner or operator may meet the requirements of this Section by obtaining a trust fund for liability coverage, as specified in subsection (j) of this Section.
- 6) An owner or operator may demonstrate the required liability coverage through the use of combinations of insurance, financial test, guarantee, letter of credit, surety bond, and trust fund, except that the owner or operator may not combine a financial test covering part of the liability coverage requirement with a guarantee unless the financial statement of the owner or operator is not consolidated with the financial statement of the guarantor. The amounts of coverage demonstrated must total at least the minimum amounts required by this Section. If the owner or operator demonstrates the required coverage through

the use of a combination of financial assurances pursuant to this subsection (b), the owner or operator must specify at least one such assurance as "primary" coverage and must specify other such assurance as "excess" coverage.

- 7) An owner or operator must notify the Agency within 30 days whenever any of the following occurs:
- A) A claim results in a reduction in the amount of financial assurance for liability coverage provided by a financial instrument authorized in subsections (b)(1) through (b)(6) of this Section;
- B) A Certification of Valid Claim for bodily injury or property damages caused by sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is entered between the owner or operator and third-party claimant for liability coverage pursuant to subsections (b)(1) through (b)(6) of this Section; or
- C) A final court order establishing a judgment for bodily injury or property damage caused by a sudden or non-sudden accidental occurrence arising from the operation of a hazardous waste treatment, storage, or disposal facility is issued against the owner or operator or an instrument that is providing financial assurance for liability coverage pursuant to subsections (b)(1) through (b)(6) of this Section.
- Request for adjusted level of required liability coverage. If an owner or operator demonstrates to the Agency that the levels of financial responsibility required by subsection (a) or (b) of this Section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the owner or operator may obtain an adjusted level of required liability coverage from the Agency. The request for an adjusted level of required liability coverage must be submitted to the Agency as part of the application pursuant to 35 Ill. Adm. Code 703.182 for a facility that does not have a permit, or pursuant to the procedures for permit modification pursuant to 35 Ill. Adm. Code 705.128 for a facility that has a permit. If granted, the modification will take the form of an adjusted level of required liability coverage, such level to be based on the Agency assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. The Agency may require an owner or operator who requests an adjusted level of required liability coverage to provide such technical and engineering information as is necessary to determine a level of financial responsibility other than that required by subsection (a) or (b) of this Section. Any request for an adjusted level of required liability coverage for a permitted facility will be treated as a request for a permit modification pursuant to 35 Ill. Adm. Code 703.271(e)(3) and 705.128.
- d) Adjustments by the Agency. If the Agency determines that the levels of financial responsibility required by subsection (a) or (b) of this Section are not consistent with the degree and duration of risk associated with treatment, storage, or disposal at the facility or group of facilities, the Agency must adjust the level of financial responsibility required pursuant to subsection (a) or (b) of this Section as may be necessary to adequately protect human health and the environment. This adjusted level must be based on the Agency's assessment of the degree and duration of risk associated with the ownership or operation of the facility or group of facilities. In addition, if the Agency determines that there is a significant risk to human health and the environment from nonsudden accidental occurrences resulting from the operations of a facility that is not a surface impoundment, landfill, or land treatment

facility, the Agency may require that an owner or operator of the facility comply with subsection (b) of this Section. An owner or operator must furnish to the Agency, within a time specified by the Agency in the request, which must be not be less than 30 days, any information that the Agency requests to determine whether cause exists for such adjustments of level or type of coverage. Any adjustment of the level or type of coverage for a facility that has a permit will be treated as a permit modification pursuant to 35 Ill. Adm. Code 703.271(e)(3) and 705.128.

- e) Period of coverage. Within 60 days after receiving certifications from the owner or operator and an independent registered professional engineer a qualified Professional Engineer that final closure has been completed in accordance with the approved closure plan, the Agency must notify the owner or operator in writing that the owner or operator is no longer required by this Section to maintain liability coverage for that facility, unless the Agency determines that closure has not been in accordance with the approved closure plan.
- f) Financial test for liability coverage.
- 1) An owner or operator may satisfy the requirements of this Section by demonstrating that it passes a financial test as specified in this subsection (f). To pass this test the owner or operator must meet the criteria of subsection (f)(1)(A) or (f)(1)(B) of this Section:
- A) The owner or operator must have the following:
- i) Net working capital and tangible net worth each at least six times the amount of liability coverage to be demonstrated by this test;
- ii) Tangible net worth of at least \$10 million; and
- iii) Assets in the United States amounting to either of the following: at least 90 percent of the total assets; or at least six times the amount of liability coverage to be demonstrated by this test.
- B) The owner or operator must have the following:
- i) A current rating for its most recent bond issuance of AAA, AA, A, or BBB as issued by Standard and Poor's, or Aaa, Aa, A, or Baa as issued by Moody's;
- ii) Tangible net worth of at least \$10 million;
- iii) Tangible net worth at least six times the amount of liability coverage to be demonstrated by this test; and
- iv) Assets in the United States amounting to either of the following: at least 90 percent of the total assets; or at least six times the amount of liability coverage to be demonstrated by this test.
- 2) The phrase "amount of liability coverage," as used in subsection (f)(1) of this Section, refers to the annual aggregate amounts for which coverage is required pursuant to subsections (a) and (b) of this Section.
- 3) To demonstrate that it meets this test, the owner or operator must submit the following three items to the Agency:

- A) A letter signed by the owner's or operator's chief financial officer and worded as specified in Section 724.251. If an owner or operator is using the financial test to demonstrate both assurance for closure or post-closure care, as specified by Sections 724.243(f) and 724.245(f) and 35 Ill. Adm. Code 725.243(e) and 725.245(e), and liability coverage, it must submit the letter specified in Section 724.251 to cover both forms of financial responsibility; a separate letter, as specified in Section 724.251, is not required.
- B) A copy of the independent certified public accountant's report on examination of the owner's or operator's financial statements for the latest completed fiscal year.
- C) A special report from the owner's or operator's independent certified public accountant to the owner or operator stating the following:
- i) The accountant has compared the data that the letter from the chief financial officer specifies as having been derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements; and
- ii) In connection with that procedure, no matters came to the accountant's attention that caused the accountant to believe that the specified data should be adjusted.
- 4) An owner or operator of a new facility must submit the items specified in subsection (f)(3) of this Section to the Agency at least 60 days before the date on which hazardous waste is first received for treatment, storage, or disposal.
- 5) After the initial submission of items specified in subsection (f)(3) of this Section, the owner of operator must send updated information to the Agency within 90 days after the close of each succeeding fiscal year. This information must consist of all three items specified in subsection (f)(3) of this Section.
- 6) If the owner or operator no longer meets the requirements of subsection (f)(1) of this Section, the owner or operator must obtain insurance, a letter of credit, a surety bond, a trust fund, or a guarantee for the entire amount of required liability coverage as specified in this Section. Evidence of insurance must be submitted to the Agency within 90 days after the end of the fiscal year for which the year-end financial data show that the owner or operator no longer meets the test requirements.
- 7) The Agency may disallow use of this test on the basis of qualifications in the opinion expressed by the independent certified public accountant in the accountant's report on examination of the owner's or operator's financial statements (see subsection (f)(3)(B) of this Section). An adverse opinion or a disclaimer of opinion will be cause for disallowance. The Agency must evaluate other qualifications on an individual basis. The owner or operator must provide evidence of insurance for the entire amount of required liability coverage, as specified in this Section, within 30 days after notification of disallowance.
- g) Guarantee for liability coverage.
- 1) Subject to subsection (g)(2) of this Section, an owner or operator may meet the requirements of this Section by obtaining a written guarantee, referred to as a "guarantee." The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a "substantial"

business relationship" with the owner or operator. The guarantor must meet the requirements for owners and operators in subsections (f)(1) through (f)(6) of this Section. The wording of the guarantee must be that specified in Section 724.251. A certified copy of the guarantee must accompany the items sent to the Agency, as specified in subsection (f)(3) of this Section. One of these items must be the letter from the guarantor's chief financial officer. If the guarantor's parent corporation is also the parent corporation of the owner or operator, this letter must describe the value received in consideration of the guarantee. If the guarantor is a firm with a "substantial business relationship" with the owner or operator, this letter must describe this "substantial business relationship" and the value received in consideration of the guarantee. The terms of the guarantee must provide for the following:

- A) If the owner or operator fails to satisfy a judgment based on a determination of liability for bodily injury or property damage to third parties caused by sudden or nonsudden accidental occurrences (or both as the case may be) arising from the operation of facilities covered by this guarantee, or if the owner or operator fails to pay an amount agreed to in settlement of claims arising from or alleged to arise from such injury or damage, that the guarantor will do so up to the limits of coverage.
- B) That the guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Agency. The guarantee must not be terminated unless and until the Agency approves alternative liability coverage complying with Section 724.247 or 35 Ill. Adm. Code 725.247.
- 2) The guarantor must execute the guarantee in Illinois. The guarantee must be accompanied by a letter signed by the guarantor that states as follows:
- A) The guarantee was signed in Illinois by an authorized agent of the guarantor;
- B) The guarantee is governed by Illinois law; and
- C) The name and address of the guarantor's registered agent for service of process.
- 3) The guarantor must have a registered agent pursuant to Section 5.05 of the Business Corporation Act of 1983 [805 ILCS 5/5.05] or Section 105.05 of the General Not-for-Profit Corporation Act of 1986 [805 ILCS 105/105.05].
- h) Letter of credit for liability coverage.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining an irrevocable standby letter of credit that conforms to the requirements of this subsection (h), and submitting a copy of the letter of credit to the Agency.
- 2) The financial institution issuing the letter of credit must be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies.
- 3) The wording of the letter of credit must be that specified in Section 724.251.

- 4) An owner or operator who uses a letter of credit to satisfy the requirements of this Section may also establish a trust fund. Under the terms of such a letter of credit, all amounts paid pursuant to a draft by the trustee of the standby trust in accordance with instructions from the trustee. The trustee of the standby trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies, or who complies with the Corporate Fiduciary Act [205 ILCS 620].
- 5) The wording of the standby trust fund must be identical to that specified in Section 724.251(n).
- i) Surety bond for liability coverage.
- 1) An owner or operator may satisfy the requirements of this Section by obtaining a surety bond that conforms to the requirements of this subsection (i) and submitting a copy of the bond to the Agency.
- 2) The surety company issuing the bond must be licensed by the Illinois Department of Insurance.
- 3) The wording of the surety bond must be that specified in Section 724.251.
- j) Trust fund for liability coverage.
- 1) An owner or operator may satisfy the requirements of this Section by establishing a trust fund that conforms to the requirements of this subsection (j) and submitting a signed, duplicate original of the trust agreement to the Agency.
- 2) The trustee must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by the Illinois Commissioner of Banks and Trust Companies, or who complies with the Corporate Fiduciary Act [205 ILCS 620].
- 3) The trust fund for liability coverage must be funded for the full amount of the liability coverage to be provided by the trust fund before it may be relied upon to satisfy the requirements of this Section. If at any time after the trust fund is created the amount of funds in the trust fund is reduced below the full amount of liability coverage to be provided, the owner or operator, by the anniversary of the date of establishment of the fund, must either add sufficient funds to the trust fund to cause its value to equal the full amount of liability coverage to be provided, or obtain other financial assurance as specified in this Section to cover the difference. For purposes of this subsection (j), "the full amount of the liability coverage to be provided" means the amount of coverage for sudden and non-sudden accidental occurrences required to be provided by the owner or operator by this Section, less the amount of financial assurance for liability coverage that is being provided by other financial assurance mechanisms being used to demonstrate financial assurance by the owner or operator.

4)	The	wording	of	the	trust	fund	must	be	that	specified	in	Section	724.251
(Sour	ce:	Amended	. at	32	Ill. R	eg		=,	effe	ctive			
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Section 724.274 Inspections

At least weekly, the owner or operator must inspect areas where containers are stored, looking except for the owner or operator of a Performance Track member facility, which may conduct inspections at least once each month, after approval by the Agency. To apply for reduced inspection frequencies, the owner or operator of the Performance Track member facility must follow the procedures identified in Section 724.115(b)(5). The owner or operator must look for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

BOARD NOTE: See Sections 724.115(c) and 724.271 for remedial action required if deterioration or leaks are detected.

(Source:	Amended	at	32	Ill.	Reg.	,	effective	

Section 724.275 Containment

- a) Container storage areas must have a containment system that is designed and operated in accordance with subsection (b) of this Section, except as otherwise provided by subsection (c) of this Section;
- b) A containment system must be designed and operated as follows:
- 1) A base must <u>underlay</u> underlie the containers that is free of cracks or gaps and is sufficiently impervious to contain leaks, spills, and accumulated precipitation until the collected material is detected and removed.
- 2) The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids;
- 3) The containment system must have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination;
- 4) Run-on into the containment system must be prevented, unless the collection system has sufficient excess capacity in addition to that required in subsection (b)(3) of this Section to contain any run-on that might enter the system; and
- 5) Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in as timely a manner as is necessary to prevent overflow of the collection system.

BOARD NOTE: If the collected material is a hazardous waste, it must be managed as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the State, it is subject to the National Pollution Discharge Elimination System (NPDES) permit requirement of Section 12(f) of the Environmental Protection Act [415 ILCS 5/12(f)] and 35 Ill. Adm. Code 309.102.

c) Storage areas that store containers holding only wastes that do not contain free liquids need not have a containment system defined by subsection

- (b) of this Section, except as provided by subsection (d) of this Section, or provided as follows:
- 1) That the storage area is sloped or is otherwise designed and operated to drain and remove liquid resulting from precipitation, or
- 2) That the containers are elevated or are otherwise protected from contact with accumulated liquid.
- d) Storage areas that store containers holding the wastes listed below that do not contain free liquids must have a containment system defined by subsection (b) of this Section: F020, F021, F022, F023, F026, and F027.

(Source:	Amended	at	32	Ill.	Reg.	—, effective	

SUBPART J: TANK SYSTEMS

Section 724.291 Assessment of Existing Tank System Integrity

- a) For each existing tank system that does not have secondary containment meeting the requirements of Section 724.293, the owner or operator must determine either that the tank system is not leaking or that it is unfit for use. Except as provided in subsection (c) of this Section, the owner or operator must, by January 12, 1988, obtain and keep on file at the facility a written assessment reviewed and certified by an independent, a qualified-registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that attests to the tank system's integrity.
- b) This assessment must determine whether the tank system is adequately designed and has sufficient structural strength and compatibility with the wastes to be stored or treated, to ensure that it will not collapse, rupture, or fail. At a minimum, this assessment must consider the following:
- 1) Design standards , if available, according to which the tank and ancillary equipment were constructed;
- 2) Hazardous characteristics of the wastes that have been and will be handled;
- 3) Existing corrosion protection measures;
- 4) Documented age of the tank system, if available (otherwise an estimate of the age); and
- 5) Results of a leak test, internal inspection, or other tank integrity examination so that the following is true:
- A) For non-enterable underground tanks, the assessment must include a leak test that is capable of taking into account the effects of temperature variations, tank end deflection, vapor pockets, and high water table effects, and
- B) For other than non-enterable underground tanks and for ancillary equipment, this assessment must include either a leak test, as described above, or other integrity examination that is certified by an independent, a qualified-registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that address cracks, leaks, corrosion, and erosion.

BOARD NOTE: The practices described in the American Petroleum Institute (API) Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in conducting other than a leak test.

- c) Tank systems that store or treat materials that become hazardous wastes subsequent to July 14, 1986, must conduct this assessment within 12 months after the date that the waste becomes a hazardous waste.
- d) If, as a result of the assessment conducted in accordance with subsection (a) of this Section, a tank system is found to be leaking or unfit for use, the owner or operator must comply with the requirements of Section 724.296.

(Source:	Amended	at	32	Ill.	Reg.	 effective	

Section 724.292 Design and Installation of New Tank Systems or Components

- a) Owners or operators of new tank systems or components must obtain and submit to the Agency, at time of submittal of Part B information, a written assessment, reviewed and certified by an independent, a qualified registered-professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), attesting that the tank system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. The assessment must show that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the wastes to be stored or treated and corrosion protection to ensure that it will not collapse, rupture, or fail. This assessment, which will be used by the Agency to review and approve or disapprove the acceptability of the tank system design, must include, at a minimum, the following information:
- 1) Design standards according to which tanks or the ancillary equipment are constructed;
- 2) Hazardous characteristics of the wastes to be handled;
- 3) For new tank systems or components in which the external shell of a metal tank or any external metal component of the tank system will be in contact with the soil or with water, a determination by a corrosion expert of the following:
- A) Factors affecting the potential for corrosion, including but not limited to the following:
- i) Soil moisture content;
- ii) Soil pH;
- iii) Soil sulfide level;
- iv) Soil resistivity;
- v) Structure to soil potential;
- vi) Influence of nearby underground metal structures (e.g., piping);

- vii) Existence of stray electric current;
- viii) Existing corrosion-protection measures (e.g., coating, cathodic protection, etc.); and
- B) The type and degree of external corrosion protection that are needed to ensure the integrity of the tank system during the use of the tank system or component, consisting of one or more of the following:
- i) Corrosion-resistant materials of construction, such as special alloys, fiberglass reinforced plastic, etc.;
- ii) Corrosion-resistant coating, such as epoxy, fiberglass, etc., with cathodic protection (e.g., impressed current or sacrificial anodes); and
- iii) Electrical isolation devices, such as insulating joints, flanges, etc.

BOARD NOTE: The practices described in the National Association of Corrosion Engineers (NACE) standard, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285, and "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in providing corrosion protection for tank systems.

- 4) For underground tank system components that are likely to be adversely affected by vehicular traffic, a determination of design or operational measures that will protect the tank system against potential damage; and
- 5) Design considerations to ensure the following:
- A) That tank foundations will maintain the load of a full tank;
- B) That tank systems will be anchored to prevent flotation or dislodgment where the tank system is placed in a saturated zone, or is located within a seismic fault zone subject to the standards of Section 724.118(a); and
- C) That tank systems will withstand the effects of frost heave.
- b) The owner or operator of a new tank system must ensure that proper handling procedures are adhered to in order to prevent damage to the system during installation. Prior to covering, enclosing or placing a new tank system or component in use, an independent qualified installation inspector or anindependent, a qualified registered professional engineer, either of whom is trained and experienced in the proper installation of tank systems or components, must inspect the system for the presence of any of the following items:
- Weld breaks;
- 2) Punctures;
- 3) Scrapes of protective coatings;
- 4) Cracks;
- 5) Corrosion;

- 6) Other structural damage or inadequate construction or installation. All discrepancies must be remedied before the tank system is covered, enclosed, or placed in use.
- c) New tank systems or components that are placed underground and which are backfilled must be provided with a backfill material that is a noncorrosive, porous, and homogeneous substance which is installed so that the backfill is placed completely around the tank and compacted to ensure that the tank and piping are fully and uniformly supported.
- d) All new tanks and ancillary equipment must be tested for tightness prior to being covered, enclosed or placed in use. If a tank system is found not to be tight, all repairs necessary to remedy the leaks in the system must be performed prior to the tank system being covered, enclosed, or placed into use.
- e) Ancillary equipment must be supported and protected against physical damage and excessive stress due to settlement, vibration, expansion, or contraction.

BOARD NOTE: The piping system installation procedures described in "Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615, or "Chemical Plant and Petroleum Refinery Piping," ASME/ANSI Standard B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988, and "Liquid Petroleum Transportation Piping Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," ASME/ANSI Standard B31.4-1986, as supplemented by B31.4a-1987, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used where applicable, as guidelines for proper installation of piping systems.

- f) The owner or operator must provide the type and degree of corrosion protection recommended by an independent corrosion expert, based on the information provided under subsection (a)(3) of this Section, or other corrosion protection if the Agency determines that other corrosion protection is necessary to ensure the integrity of the tank system during use of the tank system. The installation of a corrosion protection system that is field fabricated must be supervised by an independent corrosion expert to ensure proper installation.
- g) The owner or operator must obtain and keep on file at the facility written statements by those persons required to certify the design of the tank system and supervise the installation of the tank system in accordance with the requirements of subsections (b) through (f) of this Section, that attest that the tank system was properly designed and installed and that repairs, pursuant to subsections (b) and (d) of this Section, were performed. These written statements must also include the certification statement, as required in 35 Ill. Adm. Code 702.126(d).

(Source:	Amended	at	32	Ill.	Reg.	,	effective	
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Section 724.293 Containment and Detection of Releases

a) In order to prevent the release of hazardous waste or hazardous constituents to the environment, secondary containment that meets the requirements of this Section must be provided (except as provided in subsections (f) and (g) of this Section).

1) For a new or existing tank system or component, prior to their being put into service.

- 2) For all existing tank systems used to store or treat Hazardous Waste-Numbers F020, F021, F022, F023, F026, or F027, as defined in 35 Ill. Adm. Code-721.131, within two years after January 12, 1987;
- 3) For those existing tank systems of known and documented age, within twoyears after January 12, 1987, or the tank system has reached 15 years of age, whichever comes later;
- 4) For those existing tank systems for which the age cannot be documented, within eight years of January 12, 1987; but if the age of the facility is greater than seven years, secondary containment must be provided by the time the facility reaches 15 years of age, or within two years of January 12, 1987, whichever considerable stars at the systems system that store stores or treat treats materials that become hazardous wastes subsequent to January 12, 1987, within the time intervals required in subsections (a) (1) the containing two years after the hazardous waste must be used in place of January 12, 1987 listing, or when the tank system has reached 15 years of age, whichever comes later.
- b) Secondary containment systems must fulfill the following:
- 1) It must be designed, installed, and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system; and
- 2) It must be capable of detecting and collecting releases and accumulated liquids until the collected material is removed.
- c) To meet the requirements of subsection (b) of this Section, secondary containment systems must, at a minimum, fulfill the following:
- 1) It must be constructed of or lined with materials that are compatible with the wastes to be placed in the tank system and must have sufficient strength and thickness to prevent failure owing to pressure gradients (including static head and external hydrological forces), physical contact with the waste to which it is exposed, climatic conditions, and the stress of daily operation (including stresses from nearby vehicular traffic);
- 2) It must be placed on a foundation or base capable of providing support to the secondary containment system, resistance to pressure gradients above and below the system, and capable of preventing failure due to settlement, compression or uplift;
- 3) It must be provided with a leak-detection system that is designed and operated so that it will detect the failure of either the primary or secondary containment structure or the presence of any release of hazardous waste or accumulated liquid in the secondary containment system within 24 hours, or at the earliest practicable time if the owner or operator demonstrates, by way of

permit application, to the Agency that existing detection technologies or site conditions will not allow detection of a release within 24 hours; and

4) It must be sloped or otherwise designed or operated to drain and remove liquids resulting from leaks, spills, or precipitation. Spilled or leaked waste and accumulated precipitation must be removed from the secondary containment system within 24 hours, or in as timely a manner as is possible to prevent harm to human health and the environment, if the owner or operator demonstrates to the Agency, by way of permit application, that removal of the released waste or accumulated precipitation cannot be accomplished within 24 hours.

BOARD NOTE: If the collected material is a hazardous waste under 35 Ill. Adm. Code 721, it is subject to management as a hazardous waste in accordance with all applicable requirements of 35 Ill. Adm. Code 722 through 728. If the collected material is discharged through a point source to waters of the State, it is subject to the NPDES permit requirement of Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309. If discharged to a Publicly Owned Treatment Work (POTW), it is subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the collected material is released to the environment, it may be subject to the reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR 302.6.

- d) Secondary containment for tanks must include one or more of the following devices:
- 1) A liner (external to the tank);
- 2) A vault;
- 3) A double-walled tank; or
- 4) An equivalent device, as approved by the Board in an adjusted standards proceeding.
- e) In addition to the requirements of subsections (b), (c), and (d) of this Section, secondary containment systems must satisfy the following requirements:
- 1) An external liner system must fulfill the following:
- A) It must be designed or operated to contain 100 percent of the capacity of the largest tank within its boundary.
- B) It must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system, unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event.
- C) It must be free of cracks or gaps.
- D) It must be designed and installed to surround the tank completely and to cover all surrounding earth likely to come into contact with the waste if the waste is released from the tanks (i.e., it is capable of preventing lateral as well as vertical migration of the waste).
- 2) A vault system must fulfill the following:

- A) It must be designed or operated to contain 100 percent of the capacity of the largest tank within the vault system's boundary;
- B) It must be designed or operated to prevent run-on or infiltration of precipitation into the secondary containment system unless the collection system has sufficient excess capacity to contain run-on or infiltration. Such additional capacity must be sufficient to contain precipitation from a 25-year, 24-hour rainfall event;
- C) It must be constructed with chemical-resistant water stops in place at all joints (if any);
- D) It must be provided with an impermeable interior coating or lining that is compatible with the stored waste and that will prevent migration of waste into the concrete;
- E) It must be provided with a means to protect against the formation of and ignition of vapors within the vault, if the waste being stored or treated fulfills the following:
- i) It meets the definition of ignitable waste under 35 Ill. Adm. Code 721.121; or
- ii) It meets the definition of reactive waste under 35 Ill. Adm. Code 721.123, and may form an ignitable or explosive vapor; and
- F) It must be provided with an exterior moisture barrier or be otherwise designed or operated to prevent migration of moisture into the vault if the vault is subject to hydraulic pressure.
- 3) A double-walled tank must fulfill the following:
- A) It must be designed as an integral structure (i.e., an inner tank completely enveloped within an outer shell) so that any release from the inner tank is contained by the outer shell;
- B) It must be protected, if constructed of metal, from both corrosion of the primary tank interior and of the external surface of the outer shell; and
- C) It must be provided with a built-in continuous leak detection system capable of detecting a release within 24 hours, or at the earliest practicable time, if the owner or operator demonstrates, by way of permit application, to the Agency that the existing detection technology or site conditions would not allow detection of a release within 24 hours.

BOARD NOTE: The provisions outlined in the Steel Tank Institute document (STI) "Standard for Dual Wall Underground Steel Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used as a guideline for aspects of the design of underground steel double-walled tanks.

- f) Ancillary equipment must be provided with secondary containment (e.g., trench, jacketing, double-walled piping, etc.) that meets the requirements of subsections (b) and (c) of this Section, except as follows:
- 1) Aboveground piping (exclusive of flanges, joints, valves, and other connections) that are visually inspected for leaks on a daily basis;

- 2) Welded flanges, welded joints, and welded connections that are visually inspected for leaks on a daily basis;
- 3) Sealless or magnetic coupling pumps and sealless valves that are visually inspected for leaks on a daily basis; and
- 4) Pressurized aboveground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown devices, loss of pressure actuated shut-off devices, etc.) that are visually inspected for leaks on a daily basis.
- g) Pursuant to Section 28.1 of the Environmental Protection Act [415 ILCS 5/28.1], and in accordance with 35 Ill. Adm. Code 101 and 104, an adjusted standard will be granted by the Board regarding alternative design and operating practices only if the Board finds either that the alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous waste or hazardous constituents into the groundwater or surface water at least as effectively as secondary containment during the active life of the tank system, or that in the event of a release that does migrate to groundwater or surface water, no substantial present or potential hazard will be posed to human health or the environment. New underground tank systems may not receive an adjusted standard from the secondary containment requirements of this Section through a justification in accordance with subsection (g)(2) of this Section.
- 1) When determining whether to grant alternative design and operating practices based on a demonstration of equivalent protection of groundwater and surface water, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:
- A) The nature and quantity of the wastes;
- B) The proposed alternative design and operation;
- C) The hydrogeologic setting of the facility, including the thickness of soils present between the tank system and groundwater; and
- D) All other factors that would influence the quality and mobility of the hazardous constituents and the potential for them to migrate to groundwater or surface water.
- 2) When determining whether to grant alternative design and operating practices based on a demonstration of no substantial present or potential hazard, the Board will consider whether the petitioner has justified an adjusted standard based on the following factors:
- A) The potential adverse effects on groundwater, surface water and land quality taking into account, considering the following:
- i) The physical and chemical characteristics of the waste in the tank system, including its potential for migration;
- ii) The hydrogeological characteristics of the facility and surrounding land;
- iii) The potential for health risk caused by human exposure to waste constituents;

- iv) The potential for damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and
- v) The persistence and permanence of the potential adverse effects.
- B) The potential adverse effects of a release on groundwater quality, taking into account;
- i) The quantity and quality of groundwater and the direction of groundwater flow;
- ii) The proximity and withdrawal rates of groundwater users;
- iii) The current and future uses of groundwater in the area; and
- iv) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality.
- C) The potential adverse effects of a release on surface water quality, taking the following into account:
- i) The quantity and quality of groundwater and the direction of groundwater flow;
- ii) The patterns of rainfall in the region;
- iii) The proximity of the tank system to surface waters;
- iv) The current and future uses of surface waters in the area and water quality standards established for those surface waters; and
- v) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality.
- D) The potential adverse effect of a release on the land surrounding the tank system, taking the following into account:
- i) The patterns of rainfall in the region; and
- ii) The current and future uses of the surrounding land.
- 3) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system but which has not migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must do the following:
- A) It must comply with the requirements of Section 724.296, except Section 724.296(d); and
- B) It must decontaminate or remove contaminated soil to the extent necessary to do the following:
- i) Enable the tank system for which the alternative design and operating practices were granted to resume operation with the capability for the detection

of releases at least equivalent to the capability it had prior to the release; and

- ii) Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water; and
- C) If contaminated soil cannot be removed or decontaminated in accordance with subsection (g)(3)(B) of this Section, the owner or operator must comply with the requirement of Section 724.297(b).
- 4) The owner or operator of a tank system, for which alternative design and operating practices had been granted in accordance with the requirements of subsection (g)(1) of this Section, at which a release of hazardous waste has occurred from the primary tank system and which has migrated beyond the zone of engineering control (as established in the alternative design and operating practices), must do the following:
- A) Comply with the requirements of Section 724.296(a), (b), (c), and (d); and
- B) Prevent the migration of hazardous waste or hazardous constituents to groundwater or surface water, if possible, and decontaminate or remove contaminated soil. If contaminated soil cannot be decontaminated or removed, or if groundwater has been contaminated, the owner or operator must comply with the requirements of Section 724.297(b); and
- C) If repairing, replacing or reinstalling the tank system, provide secondary containment in accordance with the requirements of subsections (a) through (f) of this Section, or make the alternative design and operating practices demonstration to the Board again, and meet the requirements for new tank systems in Section 724.292 if the tank system is replaced. The owner or operator must comply with these requirements even if contaminated soil is decontaminated or removed and groundwater or surface water has not been contaminated.
- h) In order to make an alternative design and operating practices, the owner or operator must follow the following procedures in addition to those specified in Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104:
- 1) The owner or operator must file a petition for approval of alternative design and operating practices according to the following schedule:
- A) For existing tank systems, at least 24 months prior to the date that secondary containment must be provided in accordance with subsection (a) of this Section.
- B) For new tank systems, at least 30 days prior to entering into a contract for installation.
- 2) As part of the petition, the owner or operator must also submit the following to the Board:
- A) A description of the steps necessary to conduct the demonstration and a timetable for completing each of the steps. The demonstration must address each of the factors listed in subsection (g)(1) or (g)(2) of this Section; and
- B) The portion of the Part B permit application specified in 35 Ill. Adm. Code 703.202.

- 3) The owner or operator must complete its showing within 180 days after filing its petition for approval of alternative design and operating practices.
- 4) The Agency must issue or modify the RCRA permit so as to require the permittee to construct and operate the tank system in the manner that was provided in any Board order approving alternative design and operating practices.
- i) All tank systems, until such time as secondary containment that meets the requirements of this Section is provided, must comply with the following:
- 1) For non-enterable underground tanks, a leak test that meets the requirements of Section 724.291(b)(5) or other tank integrity methods, as approved or required by the Agency, must be conducted at least annually.
- 2) For other than non-enterable underground tanks, the owner or operator must do either of the following:
- A) Conduct a leak test, as in subsection (i)(1) of this Section, + or
- B) Develop a schedule and procedure for an assessment of the overall condition of the tank system by an interval to the tank system by an interval to the schedule and procedure must be adequate to detect obvious cracks, leaks, and corrosion or erosion that may lead to cracks and leaks. The owner or operator must remove the stored waste from the tank, if necessary, to allow the condition of all internal tank surfaces to be assessed. The frequency of these assessments must be based on the material of construction of the tank and its ancillary equipment, the age of the system, the type of corrosion or erosion protection used, the rate of corrosion or erosion observed during the previous inspection and the characteristics of the waste being stored or treated.
- 3) For ancillary equipment, a leak test or other integrity assessment, as approved by the Agency, must be conducted at least annually.

BOARD NOTE: The practices described in the API Publication, "Guide for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as a guideline for assessing the overall condition of the tank system.

- 4) The owner or operator must maintain on file at the facility a record of the results of the assessments conducted in accordance with subsections (i)(1) through (i)(3) of this Section.
- 5) If a tank system or component is found to be leaking or unfit for use as a result of the leak test or assessment in subsections (i)(1) through (1)(3) of this Section, the owner or operator must comply with the requirements of Section 724.296.

(Source:	Amended	at	32	Ill.	Reg.	 effective	

Section 724.295 Inspections

a) The owner or operator must develop and follow a schedule and procedure for inspecting overfill controls.

- b) The owner or operator must inspect the following at least once each operating day:— data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells, etc.) to ensure that the tank system is being operated according to its design.
- 1) Aboveground portions of the tank system, if any, to detect corrosion or releases of waste;
- 2) Data gathered from monitoring and leak detection equipment (e.g., pressure or temperature gauges, monitoring wells, etc.) to ensure that the tank system is bein ted according to its design;
- 3) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation, etc.).

BOARD NOTE: Section 724.115(c) requires the owner or operator to remedy any deterioration or malfunction the owner or operator finds. Section 724.296 requires the owner or operator to notify the Agency within 24 hours of confirming a leak. Also federal 40 CFR 302.6 may require the owner or operator to notify the National Response Center of a release.

- c) In addition, except as noted under subsection (d) of this Section, the owner or operator must inspect the following at least once each operating day:
- 1) Above ground portions of the tank system, if any, to detect corrosion or releases of waste; and
- 2) The construction materials and the area immediately surrounding the externally accessible portion of the tank system, including the secondary containment system (e.g., dikes) to detect erosion or signs of releases of hazardous waste (e.g., wet spots, dead vegetation).
- d) Owners or operators of tank systems that either use leak detection systems to alert facility personnel to leaks, or implement established workplace practices to ensure leaks are promptly identified, must inspect at least weekly those areas described in subsections (c)(1) and (c)(2) of this Section. Use of the alternate inspection schedule must be documented in the facility's operating record. This documentation must include a description of the established workplace practices at the facility.
- e) Performance Track member facilities may inspect on a less frequent basis, upon approval by the Director, but must inspect at least once each month. To apply for a less than weekly inspection frequency, the Performance Track member facility must follow the procedures described in Section 724.115(b)(5).
- f) Ancillary equipment that is not provided with secondary containment, as described in Section 724.293(f)(1) through (f)(4), must be inspected at least once each operating day.
- egg) The owner or operator must inspect cathodic protection systems, if present, according to, at a minimum, the following schedule to ensure that they are functioning properly:

- 1) The proper operation of the cathodic protection system must be confirmed within six months after initial installation and annually thereafter; and
- 2) All sources of impressed current must be inspected or tested, as appropriate, at least bimonthly (i.e., every other month).

BOARD NOTE: The practices described in "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE Recommended Practice RP0285-85 and "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be used, where applicable, as guidelines in maintaining and inspecting cathodic protection systems.

 $\frac{dh}{h}$) The owner or operator must document in the operating record of the facility an inspection of those items in subsections (a) through (c) of this Section.

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Section 724.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems

A tank system or secondary containment system from which there has been a leak or spill, or which is unfit for use, must be removed from service immediately, and the owner or operator must satisfy the following requirements:

- a) Cease using; prevent flow or addition of wastes. The owner or operator must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.
- b) Removal of waste from tank system or secondary containment system.
- 1) If the release was from the tank system, the owner or operator must, within 24 hours after detection of the leak or as otherwise provided in the permit, remove as much of the waste as is necessary to prevent further release of hazardous waste to the environment and to allow inspection and repair of the tank system to be performed.
- 2) If the material released was to a secondary containment system, all released materials must be removed within 24 hours or as otherwise provided in the permit to prevent harm to human health and the environment.
- c) Containment of visible releases to the environment. The owner or operator must immediately conduct a visual inspection of the release and, based upon that inspection, do the following:
- 1) Prevent further migration of the leak or spill to soils or surface water; and
- 2) Remove and properly dispose of any visible contamination of the soil or surface water.
- d) Notifications, reports.

- 1) Any release to the environment, except as provided in subsection (d)(2) of this Section, must be reported to the Agency within 24 hours of its detection.
- 2) A leak or spill of hazardous waste is exempted from the requirements of this subsection (d) if the following is true:
- A) The spill was less than or equal to a quantity of one pound; and
- B) It was immediately contained and cleaned up.
- 3) Within 30 days of detection of a release to the environment, a report containing the following information must be submitted to the Agency:
- A) Likely route of migration of the release;
- B) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate, etc.);
- C) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the Agency as soon as they become available.
- D) Proximity the downgradient drinking water, surface water, and populated areas; and
- E) Description of response actions taken or planned.
- e) Provision of secondary containment, repair, or closure.
- 1) Unless the owner or operator satisfies the requirements of subsections (e)(2) through (e)(4) of this Section, the tank system must be closed in accordance with Section 724.297.
- 2) If the cause of the release was a spill that has not damaged the integrity of the system, the owner or operator may return the system to service as soon as the released waste is removed and repairs, if necessary, are made.
- 3) If the cause of the release was a leak from the primary tank system into the secondary containment system, the system must be repaired prior to returning the tank system to service.
- 4) If the source of the release was a leak to the environment from a component of a tank system without secondary containment, the owner or operator must provide the component of the system from which the leak occurred with secondary containment that satisfies the requirements of Section 724.293 before it can be returned to service, unless the source of the leak is an aboveground portion of a tank system that can be inspected visually. If the source is an aboveground component that can be inspected visually, the component must be repaired and may be returned to service without secondary containment, as long as the requirements of subsection (f) of this Section are satisfied. If a component is replaced to comply with the requirements of this subsection (e), that component must satisfy the requirements of new tank systems or components in Sections 724.292 and 724.293. Additionally, if a leak has occurred in any portion of a tank system component that is not readily accessible for visual inspection (e.g., the bottom of an in-ground or on-ground tank), the entire

component must be provided with secondary containment in accordance with Section 724.293 prior to being returned to use.

f) Certification of major repairs. If the owner or operator has repaired a tank system in accordance with subsection (e) of this Section, and the repair has been extensive (e.g., installation of an internal liner, repair, or a ruptured primary containment or secondary containment vessel), the tank system must not be returned to service unless the owner or operator has obtained a certification by an independent, a qualified registered professional engineer Professional Engineer, in accordance with 35 Ill. Adm. Code 702.126(d), that the repaired system is capable of handling hazardous wastes without release for the intended life of the system. This certification must be submitted to the Agency within seven after returning the tank system to use placed in the operating record and maintained until closure of the facility.

BOARD NOTE: See Section 724.115(c) for the requirements necessary to remedy a failure. Also, federal 40 CFR 302.6 may require the owner or operator to notify the National Response Center of any "reportable quantity."

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SUBPART K: SURFACE IMPOUNDMENTS

Section 724.321 Design and Operating Requirements

- a) Any surface impoundment that is not covered by subsection (c) of this Section or 35 Ill. Adm. Code 725.321 must have a liner for all portions of the impoundment (except for existing portions of such impoundment). The liner must be designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility, provided that the impoundment is closed in accordance with Section 724.328(a)(1). For impoundments that will be closed in accordance with Section 724.328(a)(2), the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility. The liner must be as follows:
- 1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;
- 2) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and
- 3) Installed to cover all surrounding earth likely to be in contact with the waste or leachate.
- b) The owner or operator will be exempted from the requirements of subsection (a) of this Section if the Board grants an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104. The level of justification is a demonstration by the owner or operator that alternative

design or operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 724.193) into the groundwater or surface water at any future time. In deciding whether to grant an adjusted standard, the Board will consider the following:

- 1) The nature and quantity of the wastes;
- 2) The proposed alternative design and operation;
- 3) The hydrogeologic setting of the facility, including the attenuative capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and
- 4) All other factors that would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.
- c) The owner or operator of each new surface impoundment unit on which construction commences after January 29, 1992, each lateral expansion of a surface impoundment unit on which construction commences after July 29, 1992, and each replacement of an existing surface impoundment unit that is to commence reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system between such liners. "Construction commences" is as defined in 35 Ill. Adm. Code 720.110, under the definition of "existing facility."
- 1) Liner requirements.
- A) The liner system must include the following:
- i) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and
- ii) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3—three feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than 1 x 10-7 cm/sec.
- B) The liners must comply with subsections (a)(1), (a)(2), and (a)(3) of this Section.
- 2) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system (LDS). This LDS must be capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a LDS in this subsection (c) are satisfied by installation of a system that is, at a minimum, as follows:
- A) It is constructed with a bottom slope of one percent or more;

- B) It is constructed of granular drainage materials with a hydraulic conductivity of 1 x $\frac{10-1101}{100}$ cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or constructed of synthetic or geonet drainage materials with a transmissivity of 3 x $\frac{10-4104}{1000}$ m2/sec or more;
- C) It is constructed of materials that are chemically resistant to the waste managed in the surface impoundment and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes and any waste cover materials or equipment used at the surface impoundment;
- D) It is designed and operated to minimize clogging during the active life and post-closure care period; and
- E) It is constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sumps. The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.
- 3) The owner or operator must collect and remove pumpable liquids in the sumps to minimize the head on the bottom liner.
- 4) The owner or operator of a LDS that is not located completely above the seasonal high water table must demonstrate that the operation of the LDS will not be adversely affected by the presence of groundwater.
- d) Subsection (c) of this Section will not apply if the owner or operator demonstrates to the Agency, and the Agency finds for such surface impoundment, that alternative design or operating practices, together with location characteristics, will do the following:
- 1) It will prevent the migration of any hazardous constituent into the groundwater or surface water at least as effectively as the liners and leachate collection and removal system specified in subsection (c) of this Section; and
- 2) It will allow detection of leaks of hazardous constituents through the top liner at least as effectively.
- e) The double liner requirement set forth in subsection (c) of this Section may be waived by the Agency for any monofill, if the following is true of the unit:
- 1) The monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand, and such wastes do not contain constituents that would render the wastes hazardous for reasons other than the toxicity characteristic in 35 Ill. Adm. Code 721.124; and
- 2) Design and location.
- A) Liner, location, and groundwater monitoring.
- i) The monofill has at least one liner for which there is no evidence that such liner is leaking. For the purposes of this subsection (e), the term "liner" means a liner designed, constructed, installed, and operated to prevent hazardous waste from passing into the liner at any time during the active life

of the facility, or a liner designed, constructed, installed, and operated to prevent hazardous waste from migrating beyond the liner to adjacent subsurface soil, groundwater, or surface water at any time during the active life of the facility. In the case of any surface impoundment that has been exempted from the requirements of subsection (c) of this Section on the basis of a liner designed, constructed, installed, and operated to prevent hazardous waste from passing beyond the liner, at the closure of such impoundment, the owner or operator must remove or decontaminate all waste residues, all contaminated liner material, and contaminated soil to the extent practicable. If all contaminated soil is not removed or decontaminated, the owner or operator of such impoundment will comply with appropriate post-closure requirements, including but not limited to groundwater monitoring and corrective action;

- ii) The monofill is located more than one-quarter mile from an "underground source of drinking water" (as that term is defined in 35 Ill. Adm. Code 702.110); and
- iii) The monofill is in compliance with generally applicable groundwater monitoring requirements for facilities with permits; or
- B) The owner or operator demonstrates to the Board that the monofill is located, designed, and operated so as to assure that there will be no migration of any hazardous constituent into groundwater or surface water at any future time.
- f) The owner or operator of any replacement surface impoundment unit is exempt from subsection (c) of this Section if the following is true of the unit:
- 1) The existing unit was constructed in compliance with the design standards of 35 Ill. Adm. Code 724.321(c), (d), and (e); and

BOARD NOTE: The cited subsections implemented the design standards of sections 3004 (0)(1)(A)(i) and (0)(5) of the Resource Conservation and Recovery Act (42 USC 6901 et seq.).

- 2) There is no reason to believe that the liner is not functioning as designed.
- g) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.
- h) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the unit.
- i) The Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

(Source:	Amended	at 32	Ill.	Reg	 effective)
Section	724.323	Resp	onse	Actions		

- a) The owner or operator of surface impoundment units subject to Section 724.321(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
- 1) Notify the Agency in writing of the exceedence—exceedance within seven days after the determination;
- 2) Submit a preliminary written assessment to the Agency within 14 days after the determination, as to the amount of liquids, likely sources of liquids, possible location, size and cause of any leaks, and short-term actions taken and planned;
- 3) Determine to the extent practicable the location, size, and cause of any leak;
- 4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs or controls, and whether or not the unit should be closed;
- 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
- 6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and (b)(5) of this Section, the owner or operator must do either of the following:
- 1) Perform the following assessments:
- A) Assess the source of liquids and amounts of liquids by source;
- B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
- C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.

(Source:	Amended	at	32	Ill.	Reg.		effective	
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SUBPART L: WASTE PILES

Section 724.351 Design and Operating Requirements

- a) A waste pile (except for an existing portion of a waste pile) must have the following:
- 1) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the pile into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the waste pile. The liner may be constructed of materials that may allow waste to migrate into the liner itself (but not into the adjacent subsurface soil or groundwater or surface water) during the active life of the facility. The liner must be as follows:
- A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;
- B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and
- C) Installed to cover all surrounding earth likely to be in contact with the waste or leachate; and
- 2) A leachate collection and removal system immediately above the liner that is designed, constructed, maintained, and operated to collect and remove leachate from the pile. The Agency must specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must be as follows:
- A) Constructed of materials that are as follows:
- i) Chemically resistant to the waste managed in the pile and the leachate expected to be generated; and
- ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials and by any equipment used at the pile; and
- B) Designed and operated to function without clogging through the scheduled closure of the waste pile.
- b) The owner or operator will be exempted from the requirements of subsection (a) of this Section if the Board grants an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104. The level of justification is a demonstration by the owner or operator that alternative design or operating practices, together with location characteristics, will prevent the migration of any hazardous constituents (see Section 724.193) into the groundwater or surface water at any future time. In deciding whether to grant an adjusted standard, the Board will consider the following:
- 1) The nature and quantity of the wastes;
- 2) The proposed alternative design and operation;

- 3) The hydrogeologic setting of the facility, including attenuative capacity and thickness of the liners and soils present between the pile and groundwater or surface water; and
- 4) All other factors that influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.
- c) The owner or operator of each new waste pile unit—on which construction—commenced after January 29, 1992, each lateral expansion of a waste pile unit—on which construction commenced after July 29, 1992, and each replacement of an existing waste pile unit that was to commenced reuse after July 29, 1992, must install two or more liners and a leachate collection and removal system above and between such liners.—"Construction commenced" is as defined in Section—720.110 under "existing facility."
- 1) Liners.
- A) The liner system must include the following:
- i) A top liner designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into such liner during the active life and post-closure care period; and
- ii) A composite bottom liner, consisting of at least two components. The upper component must be designed and constructed of materials (e.g., a geomembrane) to prevent the migration of hazardous constituents into this component during the active life and post-closure care period. The lower component must be designed and constructed of materials to minimize the migration of hazardous constituents if a breach in the upper component were to occur. The lower component must be constructed of at least 3 feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than $1-2\times10-7$ cm/sec.
- B) The liners must comply with subsections (a) (1) (A), (a) (1) (B), and (a) (1) (C) of this Section.
- The leachate collection and removal system immediately above the top liner must be designed, constructed, operated, and maintained to collect and remove leachate from the waste pile during the active life and post-closure care period. The Agency must specify design and operating conditions in the permit to ensure that the leachate depth over the liner does not exceed 30 cm (one foot). The leachate collection and removal system must comply with subsections (c)(3)(C) and (c)(3)(D) of this Section.
- 3) The leachate collection and removal system between the liners, and immediately above the bottom composite liner in the case of multiple leachate collection and removal systems, is also a leak detection system (LDS). This LDS must be capable of detecting, collecting and removing leaks of hazardous constituents at the earliest practicable time through all areas of the top liner likely to be exposed to waste or leachate during the active life and post-closure care period. The requirements for a LDS in this subsection (c) are satisfied by installation of a system that is, at a minimum, as follows:
- A) Constructed with a bottom slope of one percent or more;
- B) Constructed of granular drainage materials with a hydraulic conductivity of 1\text{Xx}10-2 cm/sec or more and a thickness of 12 inches (30.5 cm) or more; or

constructed of synthetic or geonet drainage materials with a transmissivity of 3X10-5 m2/sec or more;

- C) Constructed of materials that are chemically resistant to the waste managed in the waste pile and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and equipment used at the waste pile;
- D) Designed and operated to minimize clogging during the active life and post-closure care period; and
- E) Constructed with sumps and liquid removal methods (e.g., pumps) of sufficient size to collect and remove liquids from the sump and prevent liquids from backing up into the drainage layer. Each unit must have its own sumps. The design of each sump and removal system must provide a method for measuring and recording the volume of liquids present in the sump and of liquids removed.
- 4) The owner or operator must collect and remove pumpable liquids in the LDS sumps to minimize the head on the bottom liner.
- 5) The owner or operator of a LDS that is not located completely above the seasonal high water table must demonstrate that the operation of the LDS will not be adversely affected by the presence of groundwater.
- d) The Agency must approve alternative design or operating practices to those specified in subsection (c) of this Section if the owner or operator demonstrates to the Agency, by way of permit or permit modification application, that such design or operating practices, together with location characteristics, will do the following:
- 1) Will prevent the migration of any hazardous constituent into the ground water or surface water at least as effectively as the liners and leachate collection and removal systems specified in subsection (c) of this Section; and
- 2) Will allow detection of leaks of hazardous constituents through the top liner at least as effectively.
- e) Subsection (c) of this Section does not apply to monofills that are granted a waiver by the Agency in accordance with Section 724.321(e).
- f) The owner or operator of any replacement waste pile unit is exempt from subsection (c) of this Section if the following are true:
- 1) The existing unit was constructed in compliance with the design standards of section 3004(0)(1)(A)(i) and (0)(5) of the Resource Conservation and Recovery Act (42 USC 6901 et seq.); and

BOARD NOTE: The cited provisions required the installation of two or more liners and a leachate collection system above (in the case of a landfill) and between such liners, including a top liner designed, operated and constructed of materials to prevent the migration of any constituent into such liner during the period the facility remained in operation (including any post-closure monitoring period), and a lower liner to prevent the migration of any constituent through the liner during such period. The lower liner was deemed to satisfy the requirement if it was constructed of at least a 3-foot thick layer of

recompacted clay or other natural material with a permeability of no more than 1 \times 10-7 cm/sec.

- 2) There is no reason to believe that the liner is not functioning as designed.
- g) The owner or operator must design, construct, operate, and maintain a runon control system capable of preventing flow onto the active portion of the pile during peak discharge from at least a 25-year storm.
- h) The owner or operator must design, construct, operate, and maintain a runoff management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- i) Collection and holding facilities (e.g., tanks or basins) associated with run-on and run-off control systems must be emptied or otherwise managed expeditiously after storms to maintain design capacity of the system.
- j) If the pile contains any particulate matter that may be subject to wind dispersal, the owner or operator must cover or otherwise manage the pile to control wind dispersal.
- k) The Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

(Source:	Amended	at 32	Ill.	Reg.		effective	 :
Section	724.352	Act	ion I	eakage	Rate		

- a) The Agency must approve an action leakage rate for surface impoundment waste pile units subject to Section 724.351(c) or (d). The action leakage rate is the maximum design flow rate that the LDS can remove without the fluid head on the bottom liner exceeding one foot. The action leakage rate must include an adequate safety margin to allow for uncertainties in the design (e.g., slope, hydraulic conductivity, thickness of drainage material, etc.), construction, operation, and location of the LDS; waste and leachate characteristics; likelihood and amounts of other sources of liquids in the LDS; and proposed response actions (e.g., the action leakage rate must consider decreases in the flow capacity of the system over time resulting from siltation and clogging, rib layover and creep of synthetic components of the system, overburden pressures, etc.).
- b) To determine if the action leakage rate has been exceeded, the owner or operator must convert the weekly or monthly flow rate from the monitoring data obtained under Section 724.354(c) to an average daily flow rate (gallons per acre per day) for each sump. The average daily flow rate for each sump must be calculated weekly during the active life and closure period.

(Source:	Amended	at	32	Ill.	Reg.	 effective	

Section 724.353 Response Action Plan

a) The owner or operator of waste pile units subject to Section 724.351(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action

leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.

- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
- 1) Notify the Agency in writing of the exceedence exceedance within seven days after the determination;
- 2) Submit a preliminary written assessment to the Agency within 14 days after the determination, as to the amount of liquids, likely sources of liquids, possible location, size and cause of any leaks, and short-term actions taken and planned;
- 3) Determine to the extent practicable the location, size, and cause of any leak;
- 4) Determine whether waste receipt should cease or be curtailed; whether any waste should be removed from the unit for inspection, repairs, or controls; and whether the unit should be closed;
- 5) Determine any other short-term and long-term actions to be taken to mitigate or stop any leaks; and
- 6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and (b)(5) of this Section, the owner or operator must do either of the following:
- 1) Perform the following assessments:
- A) Assess the source of liquids and amounts of liquids by source;
- B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks, and the hazard and mobility of the liquid; and
- C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.

(Source:	Amended	at	32	Ill.	Reg.	, effecti	ive	
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SUBPART M: LAND TREATMENT

Section 724.380 Closure and Post-Closure Care

a) During the closure period the owner or operator must do the following:

- 1) Continue—It must continue all operations (including pH control) necessary to maximize degradation, transformation— or immobilization of hazardous constituents within the treatment zone— as required under Section 724.373(a), except to the extent such measures are inconsistent with subsection (a)(8) of this Section;
- 2) Continue—It must continue all operations in the treatment zone to minimize run-off of hazardous constituents, as required under Section 724.373(b);
- 3) Maintain—It must maintain the run-on control system required under Section 724.373(c);
- 4) Maintain It must maintain the run-off management system required under Section 724.373(d);
- 5) Control Tt must control wind dispersal of hazardous waste if required under Section 724.373(f);
- 6) Continue It must continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section 724.376;
- 7) Continue—It must continue unsaturated zone monitoring in compliance with Section 724.378, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone; and
- 8) Establish—It must establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone. The vegetative cover must be capable of maintaining growth without extensive maintenance.
- b) For the purpose of complying with Section 724.215, when closure is completed the owner or operator may submit to the Agency certification by an independent qualified soil scientist, in lieu of an independent registered professional engineer a qualified Professional Engineer, that the facility has been closed in accordance with the specifications in the approved closure plan.
- c) During the post-closure care period the owner or operator must do the following:
- 1) Continue—It must continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone to the extent that such measures are consistent with other post-closure care activities;
- 2) Maintain—It must maintain a vegetative cover over closed portions of the facility;
- 3) $\frac{\text{Maintain}}{\text{724.373}}$ It must maintain the run-on control system required under Section 724.373(c);
- 4) Maintain It must maintain the run-off management system required under Section 724.373(d);
- 5) Control It must control wind dispersal of hazardous waste if required under Section 724.373(f);

- 6) Continue—It must continue to comply with any prohibitions or conditions concerning growth of food-chain crops under Section 724.376; and
- 7) Continue—It must continue unsaturated zone monitoring in compliance with Section 724.378, except that soil-pore liquid monitoring may be terminated 90 days after the last application of waste to the treatment zone.
- d) The owner or operator is not subject to regulation under subsections (a)(8) and (c) of this Section if the Agency finds that the level of hazardous constituents in the treatment zone soil does not exceed the background value of those constituents by an amount that is statistically significant when using the test specified in subsection (d)(3) of this Section. The owner or operator may submit such a demonstration to the Agency at any time during the closure or post-closure care periods. For the purposes of this subsection (d), the owner or operator must do the following:
- 1) The owner or operator must establish background soil values and determine whether there is a statistically significant increase over those values for all hazardous constituents specified in the facility permit under Section 724.371.
- A) Background soil values may be based on a one-time sampling of a background plot having characteristics similar to those of the treatment zone.
- B) The owner or operator must express background values and values for hazardous constituents in the treatment zone in a form necessary for the determination of statistically significant increases under subsection (d)(3) of this Section.
- 2) In taking samples used in the determination of background and treatment zone values, the owner or operator must take samples at a sufficient number of sampling points and at appropriate locations and depths to yield samples that represent the chemical make-up of soil that has not been affected by leakage from the treatment zone and the soil within the treatment zone, respectively.
- 3) In determining whether a statistically significant increase has occurred, the owner or operator must compare the value of each constituent in the treatment zone to the background value for that constituent using a statistical procedure that provides reasonable confidence that constituent presence in the treatment zone will be identified. The owner or operator must use a statistical procedure that does the following:
- B) Provides—It provides a reasonable balance between the probability of falsely identifying hazardous constituent presence in the treatment zone and the probability of failing to identify real presence in the treatment zone.
- e) The owner or operator is not subject to regulation under Subpart F of this Part if the Agency finds that the owner or operator satisfies subsection (d) of this Section and if unsaturated zone monitoring under Section 724.378 indicates that hazardous constituents have not migrated beyond the treatment zone during the active life of the land treatment unit.

(Source:	Amended	at	32	Ill.	Reg.	 effective	

SUBPART N: LANDFILLS

Section 724.404 Response Actions

- a) The owner or operator of landfill units subject to Section 724.401(c) or (d) must have an approved response action plan before receipt of waste. The response action plan must set forth the actions to be taken if the action leakage rate has been exceeded. At a minimum, the response action plan must describe the actions specified in subsection (b) of this Section.
- b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the owner or operator must do the following:
- 1) Notify the Agency in writing of the exceedence exceedance within seven days of the determination;
- 2) Submit a preliminary written assessment to the Agency within 14 days of the determination, as to the amount of liquids, likely sources of liquids, possible location, size, and cause of any leaks, and short-term actions taken and planned;
- 3) Determine to the extent practicable the location, size, and cause of any leak;
- 4) Determine whether waste receipt should cease or be curtailed, whether any waste should be removed from the unit for inspection, repairs, or controls, and whether the unit should be closed;
- 5) Determine any other short-term and longer-term actions to be taken to mitigate or stop any leaks; and
- 6) Within 30 days after the notification that the action leakage rate has been exceeded, submit to the Agency the results of the determinations specified in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of actions taken, and actions planned. Monthly thereafter, as long as the flow rate in the LDS exceeds the action leakage rate, the owner or operator must submit to the Agency a report summarizing the results of any remedial actions taken and actions planned.
- c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and (b)(5) of this Section, the owner or operator must do either of the following:
- 1) Perform the following assessments:
- A) Assess the source of liquids and amounts of liquids by source;
- B) Conduct a fingerprint, hazardous constituent, or other analyses of the liquids in the LDS to identify the source of liquids and possible location of any leaks and the hazard and mobility of the liquid; and
- C) Assess the seriousness of any leaks in terms of potential for escaping into the environment; or
- 2) Document why such assessments are not needed.

(Source:	Amended	at	32	Ill.	Req.	· —,	effective)
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- a) This subsection (a) corresponds with 40 CFR 264.314(a), which pertains to pre May 8, 1985 actions, a date long since passed. This statement maintains structural consistency with USEPA rules.
- <u>baa</u>) The placement of bulk or non-containerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill is prohibited.
- cbb) To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095B (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- $\underline{\text{dec}}$) Containers holding free liquids must not be placed in a landfill unless the following is true:
- 1) All free-standing liquid fulfills one of the following:
- A) It has been removed by decanting or other methods;
- B) It has been mixed with sorbent or solidified so that free-standing liquid is no longer observed; or
- C) It has been otherwise eliminated; or
- 2) The container is very small, such as an ampule; or
- 3) The container is designed to hold free liquids for use other than storage, such as a battery or capacitor; or
- 4) The container is a lab pack as defined in Section 724.416 and is disposed of in accordance with Section 724.416.
- edd) Sorbents used to treat free liquids to be disposed of in landfills must be nonbiodegradable. Nonbiodegradable sorbents are the following: materials listed or described in subsection (e)(1) of this Section; materials that pass one of the tests in subsection (e)(2) of this Section; or materials that are determined by the Board to be nonbiodegradable through the adjusted standard procedure of 35 Ill. Adm. Code 104.
- 1) Nonbiodegradable sorbents are the following:
- A) Inorganic minerals, other inorganic materials, and elemental carbon (e.g., aluminosilicates (clays, smectites, Fuller's earth, bentonite, calcium bentonite, montmorillonite, calciumd montmorillonite, kaolinite, micas (illite), vermiculites, zeolites, etc.), calcium carbonate (organic free limestone), oxides/hydroxides (alumina, lime, silica (sand), diatomaceous earth, etc.), perlite (volcanic glass), expanded volcanic rock, volcanic ash, cement kiln dust, fly ash, rice hull ash, activated charcoal (activated carbon), etc.); or
- B) High molecular weight synthetic polymers (e.g., polyethylene, high density polyethylene (HDPE), polypropylene, polystrene, polyurethane, polyacrylate, polynorborene, polyisobutylene, ground synthetic rubber, cross-linked

allylstrene and tertiary butyl copolymers, etc.). This does not include polymers derived from biological material or polymers specifically designed to be degradable; or

- C) Mixtures of these nonbiodegradable materials.
- 2) Tests for nonbiodegradable sorbents are the following:
- A) The sorbent material is determined to be nonbiodegradable under ASTM Method G21-70 (1984a) (Standard Practice for Determining Resistance of Synthetic Polymer Materials to Fungi), incorporated by reference in 35 Ill. Adm. Code 720.111(a);
- B) The sorbent material is determined to be nonbiodegradable under ASTM Method G22-76 (1984b) (Standard Practice for Determining Resistance of Plastics to Bacteria), incorporated by reference in 35 Ill. Adm. Code 720.111(a); or
- C) The sorbent material is determined to be non-biodegradable under OECD Guideline for Testing of Chemicals, Method 301B (CO2 Evolution (Modified Sturm Test)), incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- fee) The placement of any liquid that is not a hazardous waste in a hazardous waste landfill is prohibited (35 Ill. Adm. Code 729.311), unless the Board finds that the owner or operator has demonstrated the following in a petition for an adjusted standard pursuant to Section 28.1 of the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104:
- 1) The only reasonably available alternative to the placement in a hazardous waste landfill is placement in a landfill or unlined surface impoundment, whether or not permitted or operating under interim status, that contains or which may reasonably be anticipated to contain hazardous waste; and
- 2) Placement in the hazardous waste landfill will not present a risk of contamination of any "underground source of drinking water" (as that term is defined in 35 Ill. Adm. Code 702.110).

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SUBPART O: INCINERATORS

Section 724.443 Performance Standards

An incinerator burning hazardous waste must be designed, constructed, and maintained so that, when operated in accordance with operating requirements specified under Section 724.445, it will meet the following performance standards:

- a) Destruction and removal efficiency.
- 1) Except as provided in subsection (a)(2) of this Section, an incinerator burning hazardous waste must achieve a destruction and removal efficiency (DRE) of 99.99% for each principal organic hazardous constituent (POHC) designated (under Section 724.442) in its permit for each waste feed. DRE is determined for each POHC from the following equation:

Where:

- N = Mass feed rate of one principal organic hazardous constituent (POHC) in the waste stream feeding the incinerator O = Mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.
- 2) An incinerator burning hazardous wastes F020, F021, F022, F023, F026, or F027 must achieve a destruction and removal efficiency (DRE) of 99.9999% for each principal organic hazardous constituent (POHC) designated (under Section 724.442) in its permit. This performance must be demonstrated on POHCs that are more difficult to incinerate than tetra-, penta-, and hexachlorodibenzo-p-dioxins and dibenzofurans. DRE is determined for each POHC from the equation in subsection (a)(1) of this Section.—In addition, the owner or operator of the incinerator must notify the Agency of its intent to incinerate hazardous wastes-F020, F021, F022, F023, F026, or F027.
- b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 kilograms per hour (4 pounds per hour) of hydrogen chloride (HCl) must control HCl emissions such that the rate of emission is no greater than the larger of either 1.8 kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.
- c) An incinerator burning hazardous waste must not emit particulate matter in excess of 180 milligrams per dry standard cubic meter (0.08 grains per dry standard cubic foot) when corrected for the amount of oxygen in the stack gas according to the following formula:

1) Where:

- C = the corrected concentration of particulate $\frac{matterM}{matterM}$ the measured concentration of particulate $\frac{matterY}{matterY}$ the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in Method 3 in appendix A to 40 CFR 60 (Gas Analysis for the Determination of Dry Molecular Weight), incorporated by reference in 35 Ill. Adm. Code 720.111(b)-
- 2) This correction procedure is to be used by all hazardous waste incinerators except those operating under conditions of oxygen enrichment. For these facilities, the Agency must select an appropriate correction procedure, to be specified in the facility permit.
- d) For the purposes of permit enforcement, compliance with the operating requirements specified in the permit (under Section 724.445) will be regarded as compliance with this Section. However, evidence that compliance with those permit conditions is insufficient to ensure compliance with the performance requirements of this Section may be "information" justifying modification, revocation or reissuance of a permit under 35 Ill. Adm. Code 702.184.

(Source:	Amended	at	32	Ill.	Reg.	g,	effective	

Section 724.447 Monitoring and Inspections

a) The owner or operator must conduct, as a minimum, the following monitoring while incinerating hazardous waste:

- 1) Combustion temperature, waste feed rate, and the indicator of combustion gas velocity specified in the facility permit must be monitored on a continuous basis.
- 2) Carbon monoxide must be monitored on a continuous basis at a point in the incinerator downstream of the combustion zone and prior to release to the atmosphere.
- 3) Upon request by the Agency, sampling and analysis of the waste and exhaust emissions must be conducted to verify that the operating requirements established in the permit achieved the performance standard of Section 724.443.
- b) The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions and signs of tampering.
- c) The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability, unless the applicant demonstrates to the Agency that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, operational testing must be conducted at least monthly.
- d) This monitoring and inspection data must be recorded and the records must be placed in the operating \log -record required by Section 724.173 and maintained in the operating record for five years.

(Source:	Amended	at	32	Ill.	Reg.	, effe	ective	
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SUBPART S: SPECIAL PROVISIONS FOR CLEANUP

Section 724.652 Corrective Action Management Units

- a) To implement remedies pursuant to Section 724.201 or RCRA section 3008(h), or to implement remedies at a permitted facility that is not subject to Section 724.201, the Agency may designate an area at the facility as a corrective action management unit pursuant to the requirements in this Section. "Corrective action management unit" or "CAMU" means an area within a facility that is used only for managing CAMU-eligible wastes for implementing corrective action or cleanup at that facility. A CAMU must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the CAMU originated. One or more CAMUs may be designated at a facility.
 - 1) "CAMU-eligible waste" means the following:
- A) All solid and hazardous wastes, and all media (including groundwater, surface water, soils, and sediments) and debris, that are managed for implementing cleanup. As-generated wastes (either hazardous or non-hazardous) from ongoing industrial operations at a site are not CAMU-eligible wastes.
- B) Wastes that would otherwise meet the description in subsection (a)(1)(A) of this Section are not CAMU-eligible waste where the following is true:
- i) The wastes are hazardous waste found during cleanup in intact or substantially intact containers, tanks, or other non-land-based units found above ground, unless the wastes are first placed in the tanks, containers, or non-land-based units as part of cleanup, or the containers or tanks are excavated during the course of cleanup; or

- ii) The Agency makes the determination in subsection (a)(2) of this Section to prohibit the wastes from management in a CAMU.
- C) Notwithstanding subsection (a)(1)(A) of this Section, where appropriate, as-generated non-hazardous waste may be placed in a CAMU where such waste is being used to facilitate treatment or the performance of the CAMU.
- 2) The Agency must prohibit the placement of waste in a CAMU where the Agency determines that the wastes have not been managed in compliance with applicable land disposal treatment standards of 35 Ill. Adm. Code 728, applicable unit design requirements of this Part or 35 Ill. Adm. Code 725, or other applicable requirements of this Subtitle G, and that the non-compliance likely contributed to the release of the waste.
- 3) Prohibition against placing liquids in a CAMU.
- A) The placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not sorbents have been added) in any CAMU is prohibited except where placement of such wastes facilitates the remedy selected for the waste.
- B) The requirements in Section 724.414(d) for placement of containers holding free liquids in landfills apply to placement in a CAMU, except where placement facilitates the remedy selected for the waste.
- C) The placement of any liquid that is not a hazardous waste in a CAMU is prohibited unless such placement facilitates the remedy selected for the waste or a demonstration is made pursuant to Section 724.414(f).
- D) The absence or presence of free liquids in either a containerized or a bulk waste must be determined in accordance with Section 724.414(c). Sorbents used to treat free liquids in a CAMU must meet the requirements of Section 724.414(e).
- 4) Placement of CAMU-eligible wastes into or within a CAMU does not constitute land disposal of hazardous waste.
- 5) Consolidation or placement of CAMU-eligible wastes into or within a CAMU does not constitute creation of a unit subject to minimum technology requirements.
 - b) Establishing a CAMU.
- 1) The Agency must designate a regulated unit (as defined in Section 724.190(a)(2)) as a CAMU or must incorporate a regulated unit into a CAMU, if it determines that the following is true of a regulated unit:
- A) The regulated unit is closed or closing, meaning it has begun the closure process pursuant to Section 724.213 or 35 Ill. Adm. Code 725.213; and
- B) Inclusion of the regulated unit will enhance implementation of effective, protective, and reliable remedial actions for the facility.
- 2) The Subpart F, G, and H requirements and the unit-specific requirements of this Part or 35 Ill. Adm. Code 265 that applied to the regulated unit will continue to apply to that portion of the CAMU after incorporation into the CAMU.

- c) The Agency must designate a CAMU that will be used for storage or treatment only in accordance with subsection (f) of this Section. The Agency must designate any other CAMU in accordance with the following requirements:
- 1) The CAMU must facilitate the implementation of reliable, effective, protective, and cost-effective remedies;
- 2) Waste management activities associated with the CAMU must not create unacceptable risks to humans or to the environment resulting from exposure to hazardous wastes or hazardous constituents;
- 3) The CAMU must include uncontaminated areas of the facility, only if including such areas for the purpose of managing CAMU-eligible waste is more protective than management of such wastes at contaminated areas of the facility;
- 4) Areas within the CAMU, where wastes remain in place after closure of the CAMU, must be managed and contained so as to minimize future releases, to the extent practicable;
- 5) The CAMU must expedite the timing of remedial activity implementation, when appropriate and practicable;
- 6) The CAMU must enable the use, when appropriate, of treatment technologies (including innovative technologies) to enhance the long-term effectiveness of remedial actions by reducing the toxicity, mobility, or volume of wastes that will remain in place after closure of the CAMU; and
- 7) The CAMU must, to the extent practicable, minimize the land area of the facility upon which wastes will remain in place after closure of the CAMU.
- d) The owner or operator must provide sufficient information to enable the Agency to designate a CAMU in accordance with the criteria in this Section. This must include, unless not reasonably available, information on the following:
- 1) The origin of the waste and how it was subsequently managed (including a description of the timing and circumstances surrounding the disposal or release);
- 2) Whether the waste was listed or identified as hazardous at the time of disposal or release; and
- 3) Whether the disposal or release of the waste occurred before or after the land disposal requirements of 35 Ill. Adm. Code 728 were in effect for the waste listing or characteristic.
- e) The Agency must specify, in the permit or order, requirements for the CAMU to include the following:
 - 1) The areal configuration of the CAMU.
- 2) Except as provided in subsection (g) of this Section, requirements for CAMU-eligible waste management to include the specification of applicable design, operation, treatment, and closure requirements.

- 3) Minimum Design Requirements: a CAMU, except as provided in subsection (f) of this Section, into which wastes are placed must be designed in accordance with the following:
- A) Unless the Agency approves alternative requirements pursuant to subsection (e)(3)(B) of this Section, a CAMU that consists of new, replacement, or laterally expanded units must include a composite liner and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner. For purposes of this Section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1x10-7 cm/sec. FML components consisting of high density polyethylene (HDPE) must be at least 60 mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component;
- B) Alternative Requirements. The Agency must approve alternative requirements if it determines that either of the following is true:
- i) The Agency determines that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the groundwater or surface water at least as effectively as the liner and leachate collection systems in subsection (e)(3)(A) of this Section; or
- ii) The CAMU is to be established in an area with existing significant levels of contamination, and the Agency determines that an alternative design, including a design that does not include a liner, would prevent migration from the unit that would exceed long-term remedial goals.
- 4) Minimum treatment requirements: Unless the wastes will be placed in a CAMU for storage or treatment only in accordance with subsection (f) of this Section, CAMU-eligible wastes that, absent this Section, would be subject to the treatment requirements of 35 Ill. Adm. Code 728, and that the Agency determines contain principal hazardous constituents must be treated to the standards specified in subsection (e)(4)(C) of this Section.
- A) Principal hazardous constituents are those constituents that the Agency determines pose a risk to human health and the environment substantially higher than the cleanup levels or goals at the site.
- i) In general, the Agency must designate as principal hazardous constituents those contaminants specified in subsection (e)(4)(H) of this Section.
- BOARD NOTE: The Board has codified 40 CFR 264.552(e)(4)(i)(A)(1) and (e)(4)(i)(A)(2) as subsections (e)(4)(H)(i) and (e)(4)(H)(ii) of this Section in order to comply with Illinois Administrative Code codification requirements.
- ii) The Agency must also designate constituents as principal hazardous constituents, where appropriate, when risks to human health and the environment posed by the potential migration of constituents in wastes to groundwater are substantially higher than cleanup levels or goals at the site. When making such a designation, the Agency must consider such factors as constituent concentrations, and fate and transport characteristics under site conditions.

- iii) The Agency must also designate other constituents as principal hazardous constituents that the Agency determines pose a risk to human health and the environment substantially higher than that posed by the cleanup levels or goals at the site.
- B) In determining which constituents are "principal hazardous constituents," the Agency must consider all constituents that, absent this Section, would be subject to the treatment requirements in 35 Ill. Adm. Code 728.
- C) Waste that the Agency determines contains principal hazardous constituents must meet treatment standards determined in accordance with subsection (e) (4) (D) or (e) (4) (E) of this Section.
- D) Treatment standards for wastes placed in a CAMU.
- i) For non-metals, treatment must achieve 90 percent reduction in total principal hazardous constituent concentrations, except as provided by subsection (e)(4)(D)(iii) of this Section.
- ii) For metals, treatment must achieve 90 percent reduction in principal hazardous constituent concentrations as measured in leachate from the treated waste or media (tested according to the TCLP) or 90 percent reduction in total constituent concentrations (when a metal removal treatment technology is used), except as provided by subsection (e)(4)(D)(iii) of this Section.
- iii) When treatment of any principal hazardous constituent to a 90 percent reduction standard would result in a concentration less than 10 times the Universal Treatment Standard for that constituent, treatment to achieve constituent concentrations less than 10 times the Universal Treatment Standard is not required. Universal Treatment Standards are identified in Table U to 35 Ill. Adm. Code 728.
- iv) For waste exhibiting the hazardous characteristic of ignitability, corrosivity, or reactivity, the waste must also be treated to eliminate these characteristics.
- v) For debris, the debris must be treated in accordance with 35 Ill. Adm. Code 728.145, or by methods or to levels established pursuant to subsections (e)(4)(D)(i) through (e)(4)(D)(iv) or subsection (e)(4)(E) of this Section, whichever the Agency determines is appropriate.
- vi) Alternatives to TCLP. For metal bearing wastes for which metals removal treatment is not used, the Agency must specify a leaching test other than Method 1311 (Toxicity Characteristic Leaching Procedure), in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a) to measure treatment effectiveness, provided the Agency determines that an alternative leach testing protocol is appropriate for use, and that the alternative more accurately reflects conditions at the site that affect leaching.
- E) Adjusted standards. The Board will grant an adjusted standard pursuant to Section 28.1 of the Act to adjust the treatment level or method in subsection (e)(4)(D) of this Section to a higher or lower level, based on one or more of the following factors, as appropriate, if the owner or operator demonstrates that the adjusted level or method would adequately protect human health and the environment, based on consideration of the following:

- i) The technical impracticability of treatment to the levels or by the methods in subsection (e)(4)(D) of this Section;
- ii) The levels or methods in subsection (e)(4)(D) of this Section would result in concentrations of principal hazardous constituents (PHCs) that are significantly above or below cleanup standards applicable to the site (established either site-specifically, or promulgated pursuant to State or federal law);
- iii) The views of the affected local community on the treatment levels or methods in subsection (e)(4)(D) of this Section, as applied at the site, and, for treatment levels, the treatment methods necessary to achieve these levels;
- iv) The short-term risks presented by the on-site treatment method necessary to achieve the levels or treatment methods in subsection (e)(4)(D) of this Section;
- v) The long-term protection offered by the engineering design of the CAMU and related engineering controls under the circumstances set forth in subsection (e)(4)(I) of this Section.
- BOARD NOTE: The Board has codified 40 CFR 264.552(e)(4)(v)(E)(1) through (e)(4)(v)(E)(5) as subsections (e)(4)(I)(i) through (e)(4)(I)(v) of this Section in order to comply with Illinois Administrative Code codification requirements.
- F) The treatment required by the treatment standards must be completed prior to, or within a reasonable time after, placement in the CAMU.
- G) For the purpose of determining whether wastes placed in a CAMU have met site-specific treatment standards, the Agency must specify a subset of the principal hazardous constituents in the waste as analytical surrogates for determining whether treatment standards have been met for other principal hazardous constituents if it determines that the specification is appropriate based on the degree of difficulty of treatment and analysis of constituents with similar treatment properties.
- H) Principal hazardous constituents that the Agency must designate are the following:
- i) Carcinogens that pose a potential direct risk from ingestion or inhalation at the site at or above 10-3; and
- ii) Non-carcinogens that pose a potential direct risk from ingestion or inhalation at the site an order of magnitude or greater over their reference dose.
- I) Circumstances relating to the long-term protection offered by engineering design of the CAMU and related engineering controls are the following:
- i) Where the treatment standards in subsection (e)(4)(D) of this Section are substantially met and the principal hazardous constituents in the waste or residuals are of very low mobility;
- ii) Where cost-effective treatment has been used and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Section 724.401(c) and (d);

- iii) Where, after review of appropriate treatment technologies, the Board determines that cost-effective treatment is not reasonably available, and the CAMU meets the Subtitle C liner and leachate collection requirements for new land disposal units at Section 724.401(c) and (d);
- iv) Where cost-effective treatment has been used and the principal hazardous constituents in the treated wastes are of very low mobility; or
- v) Where, after review of appropriate treatment technologies, the Board determines that cost-effective treatment is not reasonably available, the principal hazardous constituents in the wastes are of very low mobility, and either the CAMU meets or exceeds the liner standards for new, replacement, or a laterally expanded CAMU in subsections (e)(3)(A) and (e)(3)(B) of this Section or the CAMU provides substantially equivalent or greater protection.
- 5) Except as provided in subsection (f) of this Section, requirements for groundwater monitoring and corrective action that are sufficient to do the following:
- A) Continue to detect and to characterize the nature, extent, concentration, direction, and movement of existing releases of hazardous constituents in groundwater from sources located within the CAMU;
- B) Detect and subsequently characterize releases of hazardous constituents to groundwater that may occur from areas of the CAMU in which wastes will remain in place after closure of the CAMU; and
- C) Require notification to the Agency and corrective action as necessary to adequately protect human health and the environment for releases to groundwater from the CAMU.
- 6) Except as provided in subsection (f) of this Section, closure and postclosure requirements, as follows:
- A) Closure of corrective action management units must do the following:
 - i) Minimize the need for further maintenance; and
- ii) Control, minimize, or eliminate, to the extent necessary toadequately to adequately protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous wastes, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground, to surface waters, or to the atmosphere.
- B) Requirements for closure of a CAMU must include the following, as appropriate and as deemed necessary by the Agency for a given CAMU:
- i) Requirements for excavation, removal, treatment or containment of wastes; and
- ii) Requirements for removal and decontamination of equipment, devices, and structures used in CAMU-eligible waste management activities within the CAMU.
- C) In establishing specific closure requirements for a CAMU pursuant to this subsection (e), the Agency must consider the following factors:

- i) CAMU characteristics;
- ii) Volume of wastes that remain in place after closure;
- iii) Potential for releases from the CAMU;
- iv) Physical and chemical characteristics of the waste;
- v) Hydrological Hydrogeological and other relevant environmental conditions at the facility that may influence the migration of any potential or actual releases; and
- vi) Potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.
 - D) Cap requirements:
- i) At final closure of the CAMU, for areas in which wastes will remain with constituent concentrations at or above remedial levels or goals applicable to the site after closure of the CAMU, the owner or operator must cover the CAMU with a final cover designed and constructed to meet the performance criteria listed in subsection (e)(6)(F) of this Section, except as provided in subsection (e)(6)(D)(ii) of this Section:

BOARD NOTE: The Board has codified 40 CFR 264.552(e)(6)(iv)(A)(1) through (e)(6)(iv)(A)(5) as subsections (e)(6)(F)(i) through (e)(6)(F)(v) of this Section in order to comply with Illinois Administrative Code codification requirements.

- ii) The Agency must apply cap requirements that deviate from those prescribed in subsection (e)(6)(D)(i) of this Section if it determines that the modifications are needed to facilitate treatment or the performance of the CAMU (e.g., to promote biodegradation).
- E) Post-closure requirements as necessary to adequately protect human health and the environment, to include, for areas where wastes will remain in place, monitoring and maintenance activities, and the frequency with which such activities must be performed to ensure the integrity of any cap, final cover, or other containment system.
- F) The final cover design and performance criteria are as follows:
- i) Provide long-term minimization of migration of liquids through the closed unit;
- ii) Function with minimum maintenance;
- iii) Promote drainage and minimize erosion or abrasion of the cover;
- iv) Accommodate settling and subsidence so that the cover's integrity is maintained; and
- v) Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present.

- f) A CAMU used for storage or treatment only is a CAMU in which wastes will not remain after closure. Such a CAMU must be designated in accordance with all of the requirements of this Section, except as follows:
- 1) A CAMU that is used for storage or treatment only and that operates in accordance with the time limits established in the staging pile regulations at Section 724.654(d)(1)(C), (h), and (i) is subject to the requirements for staging piles at Section 724.654(d)(1)(A) and (d)(1)(B), (d)(2), (e), (f), (j), and (k) in lieu of the performance standards and requirements for a CAMU in subsections (c) and (e)(3) through (e)(6) of this Section.
- 2) A CAMU that is used for storage or treatment only and that does not operate in accordance with the time limits established in the staging pile regulations at Section 724.654(d)(1)(C), (h), and (i):
- A) The owner or operator must operate in accordance with a time limit, established by the Agency, that is no longer than necessary to achieve a timely remedy selected for the waste and
- B) The CAMU is subject to the requirements for staging piles at Section 724.654(d)(1)(A) and (d)(1)(B), (d)(2), (e), (f), (j), and (k) in lieu of the performance standards and requirements for a CAMU in subsections (c), (e)(4), and (6) of this Section.
- g) A CAMU into which wastes are placed where all wastes have constituent levels at or below remedial levels or goals applicable to the site do not have to comply with the requirements for liners at subsection (e)(3)(A) of this Section, caps at subsection (e)(6)(D) of this Section, groundwater monitoring requirements at subsection (e)(5) of this Section or, for treatment or storage-only a CAMU, the design standards at subsection (f) of this Section.
- h) The Agency must provide public notice and a reasonable opportunity for public comment before designating a CAMU. Such notice must include the rationale for any proposed adjustments pursuant to subsection (e)(4)(E) of this Section to the treatment standards in subsection (e)(4)(D) of this Section.
- i) Notwithstanding any other provision of this Section, the Agency must impose those additional requirements that it determines are necessary to adequately protect human health and the environment.
- j) Incorporation of a CAMU into an existing permit must be approved by the Agency according to the procedures for Agency-initiated permit modifications pursuant to 35 Ill. Adm. Code 703.270 through 703.273, or according to the permit modification procedures of 35 Ill. Adm. Code 703.280 through 703.283.
- k) The designation of a CAMU does not change the Agency's existing authority to address cleanup levels, media-specific points of compliance to be applied to remediation at a facility, or other remedy selection decisions.

(Source:	Amended	at 32	Ill.	Reg.	 effective	
Section	724.654	Stag	ging 1	Piles		

a) Definition of a staging pile. A staging pile is an accumulation of solid, non-flowing remediation waste (as defined in 35 Ill. Adm. Code 720.110) that is not a containment building and which is used only during remedial operations for temporary storage at a facility. A staging pile must be located within the

contiguous property under the control of the owner or operator where the wastes to be managed in the staging pile originated. Staging piles must be designated by the Agency in accordance with the requirements in this Section.

- 1) For the purposes of this Section, storage includes mixing, sizing, blending, or other similar physical operations as long as they are intended to prepare the wastes for subsequent management or treatment.
- 2) This subsection (a)(2) corresponds with 40 CFR 264.554(a)(2), which USEPA has marked as "reserved." This statement maintains structural consistency with the federal regulations.
- b) Use of a staging pile. An owner or operator may use a staging pile to store hazardous remediation waste (or remediation waste otherwise subject to land disposal restrictions) only if an owner or operator follows the standards and design criteria the Agency has designated for that staging pile. The Agency must designate the staging pile in a permit or, at an interim status facility, in a closure plan or order (consistent with 35 Ill. Adm. Code 703.155(a)(5) and (b)(5)). The Agency must establish conditions in the permit, closure plan, or order that comply with subsections (d) through (k) of this Section.
- c) Information that an owner or operator must submit to gain designation of a staging pile. When seeking a staging pile designation, an owner or operator must provide the following:
- 1) Sufficient and accurate information to enable the Agency to impose standards and design criteria for the facility's staging pile according to subsections (d) through (k) of this Section;
- 2) Certification by an independent, a qualified registered professional engineer Professional Engineer of technical data, such as design drawings and specifications, and engineering studies, unless the Agency determines, based on information that an owner or operator provides, that this certification is not necessary to ensure that a staging pile will adequately protect human health and the environment; and
- 3) Any additional information the Agency determines is necessary to adequately protect human health and the environment.
- d) Performance criteria that a staging pile must satisfy. The Agency must establish the standards and design criteria for the staging pile in the permit, closure plan, or order.
 - 1) The standards and design criteria must comply with the following:
- A) The staging pile must facilitate a reliable, effective, and protective remedy;
- B) The staging pile must be designed so as to prevent or minimize releases of hazardous wastes and hazardous constituents into the environment, and minimize or adequately control cross-media transfer, as necessary to adequately protect human health and the environment (for example, through the use of liners, covers, or runoff and runon controls, as appropriate); and
- C) The staging pile must not operate for more than two years, except when the Agency grants an operating term extension pursuant to subsection (i) of this Section. An owner or operator must measure the two-year limit or other

operating term specified by the Agency in the permit, closure plan, or order from the first time an owner or operator places remediation waste into a staging pile. An owner or operator must maintain a record of the date when it first placed remediation waste into the staging pile for the life of the permit, closure plan, or order, or for three years, whichever is longer.

- 2) In setting the standards and design criteria, the Agency must consider the following factors:
 - A) The length of time the pile will be in operation;
- B) The volumes of wastes the owner or operator intends to store in the pile;
- C) The physical and chemical characteristics of the wastes to be stored in the unit;
 - D) The potential for releases from the unit;
- E) The hydrogeological and other relevant environmental conditions at the facility that may influence the migration of any potential releases; and
- F) The potential for human and environmental exposure to potential releases from the unit.
- e) Receipt of ignitable or reactive remediation waste. An owner or operator must not place ignitable or reactive remediation waste in a staging pile unless the following is true:
- 1) The owner or operator has treated, rendered, or mixed the remediation waste before it placed the waste in the staging pile so that the following is true of the waste:
- A) The remediation waste no longer meets the definition of ignitable or reactive pursuant to 35 Ill. Adm. Code 721.121 or 721.123; and
- B) The owner or operator has complied with Section 724.117(b); or
- 2) The owner or operator manages the remediation waste to protect it from exposure to any material or condition that may cause it to ignite or react.
- f) Managing incompatible remediation wastes in a staging pile. The term "incompatible waste" is defined in 35 Ill. Adm. Code 720.110. An owner or operator must comply with the following requirements for incompatible wastes in staging piles:
- 1) The owner or operator must not place incompatible remediation wastes in the same staging pile unless an owner or operator has complied with Section 724.117(b);
- 2) If remediation waste in a staging pile is incompatible with any waste or material stored nearby in containers, other piles, open tanks, or land disposal units (for example, surface impoundments), an owner or operator must separate the incompatible materials, or protect them from one another by using a dike, berm, wall, or other device; and

- 3) The owner or operator must not pile remediation waste on the same base where incompatible wastes or materials were previously piled, unless the base has been decontaminated sufficiently to comply with Section 724.117(b).
- g) Staging piles are not subject to land disposal restrictions and federal minimum technological requirements. Placing hazardous remediation wastes into a staging pile does not constitute land disposal of hazardous wastes or create a unit that is subject to the federal minimum technological requirements of section 3004(o) of RCRA, 42 USC 6924(o).
- h) How long an owner or operator may operate a staging pile. The Agency may allow a staging pile to operate for up to two years after hazardous remediation waste is first placed into the pile. An owner or operator must use a staging pile no longer than the length of time designated by the Agency in the permit, closure plan, or order (the "operating term"), except as provided in subsection (i) of this Section.
- i) Receiving an operating extension for a staging pile.
- 1) The Agency may grant one operating term extension of up to 180 days beyond the operating term limit contained in the permit, closure plan, or order (see subsection (1) of this Section for modification procedures). To justify the need for an extension, an owner or operator must provide sufficient and accurate information to enable the Agency to determine that the following is true of continued operation of the staging pile:
- A) Continued operation will not pose a threat to human health and the environment; and
- B) Continued operation is necessary to ensure timely and efficient implementation of remedial actions at the facility.
- 2) The Agency must, as a condition of the extension, specify further standards and design criteria in the permit, closure plan, or order, as necessary, to ensure adequate protection of human health and the environment.
- j) The closure requirement for a staging pile located in a previously contaminated area.
- 1) Within 180 days after the operating term of the staging pile expires, an owner or operator must close a staging pile located in a previously contaminated area of the site by removing or decontaminating all of the following:
 - A) Remediation waste;
 - B) Contaminated containment system components; and
 - C) Structures and equipment contaminated with waste and leachate.
- 2) An owner or operator must also decontaminate contaminated subsoils in a manner and according to a schedule that the Agency determines will adequately protect human health and the environment.
- 3) The Agency must include the above requirements in the permit, closure plan, or order in which the staging pile is designated.

- k) The closure requirement for a staging pile located in a previously uncontaminated area.
- 1) Within 180 days after the operating term of the staging pile expires, an owner or operator must close a staging pile located in an uncontaminated area of the site according to Sections 724.358(a) and 724.211 or according to 35 Ill. Adm. Code 725.358(a) and 725.211.
- 2) The Agency must include the requirement of this Section stated in subsection (k) (1) in the permit, closure plan, or order in which the staging pile is designated.
- 1) Modifying an existing permit (e.g., a RAP), closure plan, or order to allow the use of a staging pile.
- 1) To modify a permit, other than a RAP, to incorporate a staging pile or staging pile operating term extension, either of the following must occur:
- A) The Agency must approve the modification pursuant to the procedures for Agency-initiated permit modifications in 35 Ill. Adm. Code 703.270 through 703.273; or
- B) An owner or operator must request a Class 2 modification pursuant to 35 Ill. Adm. Code 703.280 through 703.283.
- 2) To modify a RAP to incorporate a staging pile or staging pile operating term extension, an owner or operator must comply with the RAP modification requirements pursuant to 35 Ill. Adm. Code 703.304(a) and (b).
- 3) To modify a closure plan to incorporate a staging pile or staging pile operating term extension, an owner or operator must follow the applicable requirements pursuant to Section 724.212(c) or 35 Ill. Adm. Code 725.212(c).
- 4) To modify an order to incorporate a staging pile or staging pile operating term extension, an owner or operator must follow the terms of the order and the applicable provisions of 35 Ill. Adm. Code 703.155(a)(5) or (b)(5).
- m) Public availability of information about a staging pile. The Agency must document the rationale for designating a staging pile or staging pile operating term extension and make this documentation available to the public.

(Source:	Amended at 32	Ill. Reg.	, effective))
SUBPART W	DRIP PADS				

Section 724.671 Assessment of Existing Drip Pad Integrity

a) For each existing drip pad, the owner or operator must evaluate the drip pad and determine that whether it meets all of the requirements of this Subpart W, except the requirements for liners and leak detection systems of Section 724.673(b). No later than June 6, 1991, the owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, a qualified registered professional engineer Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated, and re-certified annually until all upgrades, repairs or modifications necessary to achieve compliance with all—of the standards of Section 724.673 are complete. The evaluation must document the

extent to which the drip pad meets each of the design and operating standards of Section 724.673, except the standards for liners and leak detection systems, specified in Section 724.673(b).

- b) The owner or operator must develop a written plan for upgrading, repairing, and modifying the drip pad to meet the requirements of Section 724.673(b) and submit the plan to the Agency no later than two years before the date that all repairs, upgrades and modifications will be complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 724.673. The plan must be reviewed and certified by an independent a qualified, registered professional engineer Professional Engineer. All upgrades, repairs, and modifications must be completed in accordance with the following:
- 1) For-existing drip pads of known and documentable age, all upgrades, repairs, and modifications must have been completed by June 6, 1993, or when the drip pad has reached 15 years of age, whichever comes later.
- 2) For existing drip pads for which the age cannot be documented, by June 6,—1999; but, if the age of the facility is greater than seven years, all upgrades, repairs and modifications must be completed by the time the facility reaches 15 years of age or by June 6, 1993, whichever comes later.
- 3) The owner or operator may petition the Board for an extension of the line in subsection (b)(1) or (b)(2) of this Section.
- A) The owner or operator must file a petition for a RCRA variance, asspecified in 35 Ill. Adm. Code 104.
- B) The will grant the petition for extension if it finds the following:
- i) The drip pad meets all of the requirements of Section 724.673, except-those for liners and leak detection systems specified in Section 724.673(b);
- ii) That it will tinue to be a buly protect have believed the environment.
- c) Upon completion of all upgrades, repairs, and modifications, the owner or operator must submit to the Agency, the as-built drawings for the drip pad, together with a certification by an independent, a qualified registered professional engineer Professional Engineer attesting that the drip pad conforms to the drawings.
- d) If the drip pad is found to be leaking or unfit for use, the owner or operator must comply with the provisions of Section $724.672\,(m)$ or close the drip pad in accordance with Section 724.675.

(Source:	Amended	at	32	Ill.	Reg.	, effective	
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Section 724.673 Design and Operating Requirements

- a) Drip pads must fulfill the following:
- 1) Not be constructed of earthen non-earthen materials, wood, or asphalt, unless the asphalt is structurally supported;
- 2) Be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;
- 3) Have a curb or berm around the perimeter;
- 4) In addition, the drip pad must fulfill the following:
- A) Have a hydraulic conductivity of less than or equal to 1.2×10^{-7} centimeters per second (cm/sec), e.g., existing concrete drip pads must be sealed, coated, or covered with a surface material with a hydraulic conductivity of less than or equal to 1.2×10^{-7} cm/sec such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials, or other wastes while being routed to an associated collection system. This surface material must be maintained free of cracks and gaps that could adversely affect its hydraulic conductivity, and the material must be chemically compatible with the preservatives that contact the drip pad. The requirements of this provision apply only to the existing drip pads and those drip pads for which the owner or operator elects to comply with Section 724.672(a) $\frac{724.672}{20}$ instead of Section 724.672(b) $\frac{724.672}{20}$
- B) The owner or operator must obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent a qualified registered professional engineer Professional Engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and recertified annually. The evaluation must document the extent to which the drip pad meets the design and operating standards of this Section, except for in subsection (b) of this Section.
- 5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation, and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.
- BOARD NOTE: In judging the structural integrity requirement of this subsection (c), the Agency should generally consider applicable standards established by professional organizations generally recognized by the industry, including ACI 318 (Building Code Requirements for Reinforced Concrete), or ASTM C 94-90 (Standard Specification for Ready-Mixed Concrete), each incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- b) If an owner or operator elects to comply with Section 724.672(b) 724.672(a) instead of Section 724.672(a), the drip pad must have the following:
- 1) A synthetic liner installed below the drip pad that is designed, constructed, and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the

liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must fulfill the following:

- A) It must be constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation and the stress of daily operation (including stresses from vehicular traffic on the drip pad);
- B) It must be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and
- C) It must be installed to cover all surrounding earth that could come in contact with the waste or leakage; and
- 2) A leakage detection system immediately above the liner that is designed, constructed, maintained, and operated to detect leakage from the drip pad. The leakage detection system must fulfill the following:
- A) It must be constructed of materials that are as follows:
- i) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
- ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad: and
- B) It must be designed and operated to function without clogging through the scheduled closure of the drip pad; and
- C) It must be designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
- 3) A leaking collection system immediately above the liner that is designed, constructed, maintained, and operated to collect leakage from the drip pad such that it can be removed from below the drip pad. The date, time, and quantity of any leakage collected in this system and removed must be documented in the operating log.
- A) The drip pad surface must be cleaned thoroughly in a manner and frequency such that accumulated residues of hazardous waste or other materials are removed, with residues being properly managed as to allow weekly inspections of the entire drip pad surface without interference of hindrance from accumulated residues of hazardous waste or other materials on the drip pad. The owner or operator must document the date and time of each cleaning and cleaning procedure used in the facility's operating log. The owner or operator must determine if the residues are hazardous, as per 35 Ill. Adm. Code 722.111, and, if so, the owner or operator must manage them under 35 Ill. Adm. Code 721 through 728, and Section 3010 of RCRA.
- B) The federal rules do not contain a 40 CFR 264.573(b)(3)(B). This subsection (b) is added to conform to Illinois Administrative Code rules.

c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be released from the drip pad.

BOARD NOTE: See subsection (m) of this Section for remedial action required if deterioration or leakage is detected.

- d) The drip pad and associated collection system must be designed and operated to convey, drain, and collect liquid resulting from drippage or precipitation in order to prevent run-off.
- e) Unless the drip pad is protected by a structure, as described in Section 724.670(b), the owner or operator must design, construct, operate, and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system.
- f) Unless the drip pad is protected by a structure or cover, as described in Section 724.670(b), the owner or operator must design, construct, operate, and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f) of this Section. The owner or operator must obtain a statement from an independent—a qualified registered professional Engineer certifying that the drip pad design meets the requirements of this Section.
- h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- i) The drip surface must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator must document, in the facility's operating log, the date and time of each cleaning and the cleaning procedure used.
- j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.
- k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator must maintain records sufficient to document that all treated wood is held on the pad, in accordance with this Section, following treatment.
- 1) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.
- m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the condition must be repaired within a reasonably

prompt period of time following discovery, in accordance with the following procedures:

- 1) Upon detection of a condition that may have caused or has caused a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator must do the following:
- A) Enter a record of the discovery in the facility operating log;
- B) Immediately remove from service the portion of the drip pad affected by the condition;
- C) Determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
- D) Within 24 hours after discovery of the condition, notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.
- 2) The Agency must do the following: review the information submitted, make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
- 3) Upon completing all repairs and clean up, the owner or operator must notify the Agency in writing and provide a certification, signed by an independent, qualified registered professional engineer, that the repairs and clean up cleanup have been completed according to the written plan submitted in accordance with subsection (m)(1)(D) of this Section.
- n) If a permit is necessary, the Agency must specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.
- o) The owner or operator must maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices, and a description of treated wood storage and handling practices.

(Source:	Amended	at 32 Ill. Reg.	, effective)
Section	724.674	Inspections		

a) During construction or installation, liners and cover systems (e.g., membranes, sheets, or coatings) must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation, liners must be inspected and certified by a qualified Professional Engineer as meeting the requirements of set forth in Section 724.673 by an independent qualified registered professional engineer. 724.673. The certification must be maintained at the facility as part of the facility operating record. After installation liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, or blisters.

- b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
- Deterioration, malfunctions, or improper operation of run-on and run-off control systems;
- 2) The presence of leakage in and proper functioning of leak detection system.
- 3) Deterioration or cracking of the drip pad surface.

 $\tt BOARD$ NOTE: See Section 724.672(m) for remedial action required if deterioration or leakage is detected.

(Source: Amended at 32 Ill. Reg. _____, effective ______

SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

Section 724.936 Reporting Requirements

- a) A semiannual report must be submitted by owners and operators subject to the requirements of this Subpart AA to the Agency by dates specified in the RCRA permit. The report must include the following information:
- 1) The USEPA identification number (35 Ill. Adm. Code 722.112), name, and address of the facility.
- 2) For each month during the semiannual reporting period the following:
- A) Dates when the control device did the following:
- i) Exceeded or operated outside of the design specifications, as defined in Section 724.935(c)(4); and
- ii) Such exceedences exceedances were not corrected within 24 hours, or that a flare operated with visible emissions, as defined by Method 22 monitoring;
- B) The duration and cause of each exceedence exceedance or visible emissions; and
- C) Any corrective measures taken.
- b) If during the semiannual reporting period, the control device does not exceed or operate outside of the design specifications, as defined in Section 724.935(c)(4), for more than 24 hours or a flare does not operate with visible emissions, as defined in Section 724.933(d), a report to the Agency is not required.

(Source: Amended at 32 Ill. Reg. _____, effective _____)

SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section 724.961 Alternative Percentage Standard for Valves

a) An owner or operator subject to the requirements of Section 724.957 may elect to have all valves within a hazardous waste management unit comply with an

alternative standard that allows no greater than two percent of the valves to leak.

- b) The following requirements must be met if an owner or operator decides to comply with the alternative standard of allowing two percent of valves to leak:
- 1) An owner or operator must notify the Agency that the owner or operator has elected to comply with the requirements of this Section.21) A performance test as specified in subsection (c) of this Section must be conducted initially upon designation, annually and other times specified in the RCRA permit.
- $\frac{322}{1}$ If a valve leak is detected it must be repaired in accordance with Section 724.957(d) and (e).
- c) Performance tests must be conducted in the following manner:
- 1) All valves subject to the requirements in Section 724.957 within the hazardous waste management unit must be monitored within one week by the methods specified in Section 724.963(b).
- 2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- 3) The leak percentage must be determined by dividing the number of valves subject to the requirements in Section 724.957 for which leaks are detected by the total number of valves subject to the requirements in Section 724.957 within the hazardous waste management unit.
- d) If a reperator decides to comply with this Section no longer, the owner or operator must notify the Agency in writing that the work practice—standard described in Section 724.957(a) through (e) will be followed.

(Source: Amended at 32 Ill. Reg, effective
Section 724.962 Skip Period Alternative for Valves
a) Election. An owner or operator subject to the requirements of Section 72 .957 y elect for all valves within a haz us wast nt unit to with one of the alternative work practices specified in subsections (b)(2) and (b)(3) of this Section.

- a) An owner or operator subject to the requirements of Section 724.957 may elect for all valves within a hazardous waste management unit to comply with one of the alternative work practices specified in subsections (b)(2) and (b)(3) of this Section—
- 2) An owner or operator must notify the Age before is the ting one of the alternative work practices.
- b) Reduced Monitoring.

- 1) An owner or operator must comply with the requirements for valves, as described in Section 724.957, except as described in subsections (b)(2) and (b)(3).
- 2) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip one of the quarterly leak detection periods (i.e., the owner or operator may monitor for leaks once every six months) for the valves subject to the requirements in Section 724.957.
- 3) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than two percent, an owner or operator may begin to skip three of the quarterly leak detection periods (i.e., the owner or operator may monitor for leaks once every year) for the valves subject to the requirements in Section 724.957.
- 4) If the percentage of valves leaking is greater than 2 percent, the owner or operator must monitor monthly in compliance with the requirements in Section 724.957, but may again elect to use this Section after meeting the requirements of Section 724.957(c)(1).

(Source:	Amended	at	32	Ill.	Reg.	 effective	 =

Section 724.965 Reporting Requirements

- a) A semiannual report must be submitted by owners and operators subject to the requirements of this Subpart BB to the Agency by dates specified in the RCRA permit. The report must include the following information:
- 1) The USEPA identification number (35 Ill. Adm. Code 722.112), name, and address of the facility.
- 2) For each month during the semiannual reporting period, the following:
- A) The equipment identification number of each valve for which a leak was not repaired, as required in Section 724.957(d).
- B) The equipment identification number of each pump for which a leak was not repaired, as required in Section 724.952(c) and (d)(6).
- C) The equipment identification number of each compressor for which a leak was not repaired, as required in Section 724.953(g) $_{7...}$
- 3) Dates of hazardous waste management unit shutdowns that occurred within the semiannual reporting period.
- 4) For each month during the semiannual reporting period, dates when the control device installed as required by Sections 724.952, 724.953, 724.954, or 724.955, exceeded or operated outside of the design specifications, as defined in Section 724.964(e) and as indicated by the control device monitoring required by Section 724.960 and was not corrected within 24 hours, the duration and cause of each exceedence exceedance, and any corrective measures taken.
- b) If, during the semiannual reporting period, leaks from valves, pumps, and compressors are repaired as required in Sections 724.957(d), 724.952(c) and (d)(6), and 724.953(g), respectively, and the control device does not exceed or

operate outside of the design specifications, as defined in Section 724.964(e) for more than 24 hours, a report to the Agency is not required.

(Source:	Amended	at	32	Ill.	Reg.	, effective	
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SUBPART DD: CONTAINMENT BUILDINGS

Section 724.1100 Applicability

The requirements of this Subpart DD apply to owners or operators who store or treat hazardous waste in units designed and operated under Section 724.1101. These provisions became effective on February 18, 1993.—The owner or operator is not subject to the definition of land disposal in 35 Ill. Adm. Code 728.102 provided that the unit fulfills the following:

- a) It is a completely enclosed, self-supporting structure that is designed and constructed of manmade materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to the following:
- pressure gradients;
- 2) settlement, compression, or uplift;
- 3) physical contact with the hazardous wastes to which they are exposed;
- 4) climatic conditions; or
- 5) the stresses of daily operation including the movement of heavy equipment within the unit and contact of such equipment within the unit and contact of such equipment with containment walls.
- b) It has a primary barrier that is designed to be sufficiently durable to withstand the movement of personnel, wastes, and handling equipment within the unit.
- c) If used to manage liquids, the unit has the following:
- 1) A primary barrier designed and constructed of materials to prevent migration of hazardous constituents into the barrier;
- 2) A liquid collection system designed and constructed of materials to minimize the accumulation of liquid on the primary barrier; and
- 3) A secondary containment system designed and constructed of materials to prevent migration of hazardous constituents into the barrier, with a leak detection and liquid collection system capable of detecting, collecting, and removing leaks of hazardous constituents at the earliest practicable time, unless the unit has been granted a variance from the secondary containment system requirements under Section 724.1101(b)(4);
- d) It has controls sufficient to permit fugitive dust emissions to meet the no visible emission standard in Section 724.1101(c)(1)(A); and
- e) It is designed and operated to ensure containment and prevent the tracking of materials from the unit by personnel or equipment.

(Source: Ar	nended a	at 32	Ill.	Req.	, effective	
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SUBPART DD: CONTAINMENT BUILDINGS

Section 724.1101 Design and Operating Standards

- a) All containment buildings must comply with the following design and operating standards:
- 1) The containment building must be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g._ precipitation, wind, run on) and to assure containment of managed wastes.
- The floor and containment walls of the unit, including the secondary containment system if required under subsection (b) of this Section, must be designed and constructed of materials of sufficient strength and thickness to support themselves, the waste contents, and any personnel and heavy equipment that operate within the unit, and to prevent failure due to pressure gradients, settlement, compression, or uplift, physical contact with the hazardous wastes to which they are exposed; climatic conditions; and the stresses of daily operation, including the movement of heavy equipment within the unit and contact of such equipment with containment walls. The unit must be designed so that it has sufficient structural strength to prevent collapse or other failure. All surfaces to be in contact with hazardous wastes must be chemically compatible with those wastes. The containment building must meet the structural integrity requirements established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) and the American Society of Testing Materials (ASTM). If appropriate to the nature of the waste management operation to take place in the unit, an exception to the structural strength requirement may be made for light-weight doors and windows that meet the following criteria:
- A) They provide an effective barrier against fugitive dust emissions under subsection (c)(1)(C) of this Section; and
- B) The unit is designed and operated in a fashion that assures that wastes will not actually come in contact with these openings.
- 3) Incompatible hazardous wastes or treatment reagents must not be placed in the unit or its secondary containment system if they could cause the unit or secondary containment system to leak, corrode, or otherwise fail.
- 4) A containment building must have a primary barrier designed to withstand the movement of personnel, waste, and handling equipment in the unit during the operating life of the unit and appropriate for the physical and chemical characteristics of the waste to be managed.
- b) For a containment building used to manage hazardous wastes containing free liquids or treated with free liquids (the presence of which is determined by the paint filter test, a visual examination, or other appropriate means), the owner or operator must include the following:
- 1) A primary barrier designed and constructed of materials to prevent the migration of hazardous constituents into the barrier (e.g., a geomembrane covered by a concrete wear surface).

- 2) A liquid collection and removal system to minimize the accumulation of liquid on the primary barrier of the containment building, as follows:
- A) The primary barrier must be sloped to drain liquids to the associated collection system; and
- B) Liquids and waste must be collected and removed to minimize hydraulic head on the containment system at the earliest practicable time.
- 3) A secondary containment system including a secondary barrier designed and constructed to prevent migration of hazardous constituents into the barrier, and a leak detection system that is capable of detecting failure of the primary barrier and collecting accumulated hazardous wastes and liquids at the earliest practicable time.
- A) The requirements of the leak detection component of the secondary containment system are satisfied by installation of a system that is, at a minimum, as follows:
- i) It is constructed with a bottom slope of 1 percent or more; and
- ii) It is constructed of a granular drainage material with a hydraulic conductivity of 1 $\frac{2}{3}$ 10-2 cm/sec or more and a thickness of 12 inches (30.5 cm) or more, or constructed of synthetic or geonet drainage materials with a transmissivity of 3 $\frac{2}{3}$ 10-5 m2/sec or more.
- B) If treatment is to be conducted in the building, an area in which such treatment will be conducted must be designed to prevent the release of liquids, wet materials, or liquid aerosols to other portions of the building.
- C) The secondary containment system must be constructed of materials that are chemically resistant to the waste and liquids managed in the containment building and of sufficient strength and thickness to prevent collapse under the pressure exerted by overlaying materials and by any equipment used in the containment building. (Containment buildings can serve as secondary containment systems for tanks placed within the building under certain conditions. A containment building can serve as an external liner system for a tank, provided it meets the requirements of Section 724.193(d)(1) 724.193(e)(1). In addition, the containment building must meet the requirements of Section 724.193(b) and Sections 724.193(c)(1) and (c)(2) to be an acceptable secondary containment system for a tank.)
- 4) For existing units other than 90-day generator units, USEPA may delay the secondary containment requirement for up to two years, based on a demonstration by the owner or operator that the unit substantially meets the standards of this Subpart DD. In making this demonstration, the owner or operator must have done the following:
- A) Provided written notice to USEPA of their request by Nov.November 16, 1992. This notification must have described the unit and its operating practices with specific reference to the performance of existing systems, and specific plans for retrofitting the unit with secondary containment;
- B) Responded to any comments from USEPA on these plans within 30 days; and
- C) Fulfilled the terms of the revised plans, if such plans are approved by USEPA.

- c) An owner or operator of a containment building must do the following:
- A) Maintain the primary barrier to be free of significant cracks, gaps, corrosion, or other deterioration that could cause hazardous waste to be release from the primary barrier;
- B) Maintain the level of the stored or treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded;
- C) Take measures to prevent the tracking of hazardous waste out of the unit by personnel or by equipment used in handling the waste. An area must be designated to decontaminate equipment and any rinsate must be collected and properly managed; and
- D) Take measures to control fugitive dust emissions such that any openings (doors, windows, vents, cracks, etc.) exhibit no visible emissions (see Method 22 (Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). In addition, all associated particulate collection devices (e.g., fabric filter, electrostatic precipitator, etc.) must be operated and maintained with sound air pollution control practices (see 40 CFR 60 for guidance). This state of no visible emissions must be maintained effectively at all times during routine operating and maintenance conditions, including when vehicles and personnel are entering and exiting the unit.

- 2) Obtain—It must obtain and keep on site a certification by a qualified registered professional engineer (PE)—Professional Engineer that the containment building design meets the requirements of subsections (a) through (c) of this Section. For units placed into operation prior to February 18, 1993, this certification must have been placed in the facility's operating record (on site files for generators that are not formally required to have operating records)—no later than 60 days after the date of initial operation of the unit. After February 18, 1993, PE certification has been required prior to operation of the unit.
- 3) Throughout the active life of the containment building, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, it must repair the condition promptly. In addition, however—the following is regimed, in accordance with the following procedures:
- A) Upon detection of a condition that has caused led to a release of hazardous wastes (e.g., upon detection of leakage from the primary barrier) the owner or operator must do the following:

- i) Enter a record of the discovery in the facility operating record;
- ii) Immediately remove the portion of the containment building affected by the condition from service;
- iii) Determine what steps must be taken to repair the containment building, remove any leakage from the secondary collection system, and establish a schedule for accomplishing the cleanup and repairs; and
- iv) Within seven days after the discovery of the condition, notify the Agency in writing of the condition, and within 14 working days, provide a written notice to the Agency with a description of the steps taken to repair the containment building, and the schedule for accomplishing the work.
- B) The Agency must review the information submitted, make a determination in accordance with Section 34 of the Act, regarding whether the containment building must be removed from service completely or partially until repairs and cleanup are complete, and notify the owner or operator of the determination and the underlying rationale in writing.
- C) Upon completing all repairs and cleanup the owner and operator must notify the Agency in writing and provide a verification, signed by a qualified, registered professional engineer, that the repairs and cleanup have been completed according to the written plan submitted in accordance with subsection (c)(3)(A)(iv) of this Section.
- 4) Inspect—It must inspect and record in the facility's operating record, at least once every seven days, except for the owner or operator of a Performance Track member facility, which must inspect the record at least once each month after approval by the Agency, data gathered from monitoring—equipment and leak detection equipment, as well as the containment building and the area immediately surrounding the containment building, to detect signs of releases of hazardous waste. To apply for a reduced monitoring frequency, the owner or operator of a Performance Track member facility must follow the procedures described in Section 724.115(b)(5).
- d) For a containment <u>buildings</u> building that <u>contains</u> both areas <u>both</u> with and without secondary containment, the owner or operator must do the following:
- 1) Design and operate each area in accordance with the requirements enumerated in subsections (a) through (c) of this Section;
- 2) Take measures to prevent the release of liquids or wet materials into areas without secondary containment; and
- 3) Maintain in the facility's operating log a written description of the operating procedures used to maintain the integrity of areas without secondary containment.
- e) Notwithstanding any other provision of this Subpart DD, the Agency must, in writing, not require allow the use of alternatives to the requirements for secondary containment for a permitted containment building where the Agency has determined that the facility owner or operator demonstrates has adequately demonstrated that the only free liquids in the unit are limited amounts of dust suppression liquids required to meet occupational health and safety

without a secondary containment system.
(Source: Amended at 32 Ill. Reg, effective) ILLINOIS REGISTER
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POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

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