

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

1) Heading of the Part: Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

2) Code Citation: 35 Ill. Adm. Code 724

3) Section Numbers:                      Proposed Actions:

724.101	Amendment
724.103	Amendment
724.110	Amendment
724.112	Amendment
724.113	Amendment
724.114	Amendment
724.115	Amendment
724.116	Amendment
724.117	Amendment
724.118	Amendment
724.119	Amendment
724.132	Amendment
724.133	Amendment
724.156	Amendment
724.171	Amendment
724.172	Amendment
724.173	Amendment
724.175	Amendment
724.176	Amendment
724.190	Amendment
724.191	Amendment
724.193	Amendment
724.196	Amendment
724.197	Amendment
724.198	Amendment
724.199	Amendment
724.200	Amendment
724.201	Amendment
724.213	Amendment
724.216	Amendment
724.217	Amendment
724.218	Amendment
724.219	Amendment
724.241	Amendment

RECEIVED  
CLERK'S OFFICE

JUN 29 2018

STATE OF ILLINOIS  
Pollution Control Board

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

724.242	Amendment
724.243	Amendment
724.245	Amendment
724.247	Amendment
724.270	Amendment
724.274	Amendment
724.275	Amendment
724.279	Amendment
724.290	Amendment
724.291	Amendment
724.292	Amendment
724.293	Amendment
724.295	Amendment
724.296	Amendment
724.297	Amendment
724.298	Amendment
724.300	Amendment
724.321	Amendment
724.323	Amendment
724.327	Amendment
724.328	Amendment
724.332	Amendment
724.350	Amendment
724.351	Amendment
724.353	Amendment
724.358	Amendment
724.372	Amendment
724.373	Amendment
724.376	Amendment
724.378	Amendment
724.380	Amendment
724.382	Amendment
724.401	Amendment
724.404	Amendment
724.410	Amendment
724.412	Amendment
724.413	Amendment
724.414	Amendment
724.416	Amendment
724.440	Amendment

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

724.443	Amendment
724.444	Amendment
724.445	Amendment
724.650	Amendment
724.651	Amendment
724.652	Amendment
724.653	Amendment
724.654	Amendment
724.655	Amendment
724.670	Amendment
724.671	Amendment
724.673	Amendment
724.675	Amendment
724.701	Amendment
724.930	Amendment
724.931	Amendment
724.932	Amendment
724.933	Amendment
724.934	Amendment
724.935	Amendment
724.950	Amendment
724.951	Amendment
724.952	Amendment
724.953	Amendment
724.954	Amendment
724.955	Amendment
724.956	Amendment
724.957	Amendment
724.958	Amendment
724.960	Amendment
724.961	Amendment
724.962	Amendment
724.963	Amendment
724.964	Amendment
724.980	Amendment
724.983	Amendment
724.984	Amendment
724.985	Amendment
724.986	Amendment
724.987	Amendment

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

724.988	Amendment
724.989	Amendment
724.990	Amendment
724.1101	Amendment
724.1102	Amendment
724.1201	Amendment
724.1202	Amendment
724.Appendix I	Amendment

- 4) Statutory Authority: 415 ILCS 5/7.2, 22.4, and 27
- 5) A Complete Description of the Subjects and Issues Involved: The amendments to Part 724 are a single segment of the consolidated docket R17-14/R17-15/R18-11/R18-31 rulemaking that also affects 35 Ill. Adm. Code 702 through 705, 720 through 723, 725 through 728, 730, 733, 738, 739, and 810 through 812. Due to the extreme volume of the consolidated docket, each Part is covered by a notice in four separate issues of the Illinois Register. Included in this issue are 35 Ill. Adm. Code 724 and 725. The consolidated docket R17-14/R17-15/R18-11/R18-31 rulemaking updates the Illinois hazardous waste, underground injection control (UIC), and Municipal Solid Waste Landfill (MSWLF) rules to incorporate amendments adopted by the United States Environmental Protection Agency (USEPA) during calendar years 2016 and 2017, embracing two update periods: July 1, 2016 through December 31, 2016 and July 1, 2017 through December 31, 2017. The consolidated docket R17-14/R17-15/R18-11/R18-31 rulemaking further makes numerous corrections and non-substantive stylistic revisions that the Board finds necessary. A comprehensive description is contained in the Board's opinion and order of March 3, 2016, proposing amendments in docket R16-7, which opinion and order is available from the address below.

The following briefly summarizes the federal actions in the update periods:

November 28, 2016 (81 Fed. Reg. 85696): USEPA revised requirements for importing and exporting hazardous waste. USEPA amended 40 C.F.R. 260 through 267, 271, and 273. USEPA intended greater protection of human health and the environment, greater consistency with current requirements for shipments between members of the Organization for Economic Cooperation and Development (OECD), and implementation of electronic submittal of import- and export-related documents into an Automated Export System.

November 28, 2016 (81 Fed. Reg. 85732): USEPA adopted the GIR, which extensively revised requirements for generators hazardous waste. USEPA revised

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

rules in all parts of the hazardous waste rules: 40 C.F.R. 260 through 268, 270, 271, 273, and 279. The GIR also included revisions to RCRA Subtitle D rules in 40 C.F.R. 257 and 258. The federal MSWLF rules are codified in 40 C.F.R. 258. USEPA intended that reorganization of the hazardous waste generator requirements would make them more user-friendly and address gaps in the rules to make them more effective and protective of human health and the environment. USEPA also corrected inadvertent errors and remove obsolete provisions.

August 29, 2017 (82 Fed. Reg. 41015): USEPA established the Automated Export System (AES) filing compliance date, a critical implementation date for electronic reporting hazardous waste exports. As of December 31, 2017, exporters of manifested hazardous waste, exporters of universal waste, exporters of spent lead-acid batteries for recycling or disposal, and exporters of cathode ray tubes (CRTs) for recycling were to report using the AES for export shipments. After the AES filing compliance date, the use of paper reporting was no longer permissible for these exports.

December 26, 2017 (82 Fed. Reg. 60894): USEPA further revised the rules for imports and exports of hazardous waste. No person can assert a confidential business information (CBI) claim for documents relating to import, export, and transit of hazardous waste and those specific to export of excluded CRTs.

Specifically, the amendments to Part 724 incorporate elements of the Generator Improvements Rule and the Hazardous Waste Import-Export Revisions. The Board makes several needed corrections in the text of the rules.

Tables appear in a document entitled "Identical-in-Substance Rulemaking Addendum (Proposed)" that the Board added to consolidated docket R17-14/R17-15/R18-11/R18-31. The tables list the deviations from the literal text of the federal amendments and the several necessary corrections and stylistic revisions not directly derived from USEPA actions. Persons interested in the details of those deviations from the literal text should refer to the Identical-in-Substance Rulemaking Addendum (Proposed) in consolidated docket R17-14/R17-15/R18-11/R18-31.

Section 22.4 of the Environmental Protection Act [415 ILCS 5/22.4] provides that Section 5-35 of the Illinois Administrative Procedure Act [5 ILCS 100/5-35] does not apply to this rulemaking. Because this rulemaking is not subject to Section 5-35 of the IAPA, it is not subject to First Notice or to Second Notice review by the Joint Committee on Administrative Rules (JCAR).

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None
- 7) Does this rulemaking replace an emergency rule currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? No
- 10) Are there any other rulemakings pending on this Part? No
- 11) Statement of Statewide Policy Objective: These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].
- 12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference consolidated docket R17-14/R17-15/R18-11/R18-31 and be addressed to:

Don A. Brown, Clerk  
Illinois Pollution Control Board  
State of Illinois Center, Suite 11-500  
100 W. Randolph St.  
Chicago IL 60601

Please direct inquiries to the following person and reference consolidated docket R17-14/R17-15/R18-11/R18-31:

Michael Mc Cambridge  
Staff Attorney  
Illinois Pollution Control Board  
100 W. Randolph, 11-500  
Chicago IL 60601

312/814-6924  
e-mail: michael.mccambridge@illinois.gov

Request copies of the Board's opinion and order at 312/814-3620, or download a copy from the Board's Website at <http://www.ipcb.state.il.us>.

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED AMENDMENTS

- 13) Initial Regulatory Flexibility Analysis:
- A) Types of small businesses, small municipalities, and not-for-profit corporations affected: This rulemaking may affect those small businesses, small municipalities, and not-for-profit corporations disposing of industrial wastewaters into the sewage collection system of a publicly owned treatment works. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].
  - B) Reporting, bookkeeping or other procedures required for compliance: The existing rules and proposed amendments require extensive reporting, bookkeeping and other procedures, including the preparation of manifests and annual reports, waste analyses and maintenance of operating records. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].
  - C) Types of professional skills necessary for compliance: Compliance with the existing rules and proposed amendments may require the services of an attorney, certified public accountant, chemist and registered professional engineer. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b)].
- 14) Regulatory Agenda on which this rulemaking was summarized: January 2017 and January 2018

The full text of the Proposed Amendments begins on the next page:

1 TITLE 35: ENVIRONMENTAL PROTECTION  
2 SUBTITLE G: WASTE DISPOSAL  
3 CHAPTER I: POLLUTION CONTROL BOARD  
4 SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

5  
6 PART 724  
7 STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE  
8 TREATMENT, STORAGE, AND DISPOSAL FACILITIES  
9

10 SUBPART A: GENERAL PROVISIONS  
11

- 12 Section  
13 724.101 Purpose, Scope, and Applicability  
14 724.103 Relationship to Interim Status Standards  
15 724.104 Electronic Reporting  
16

17 SUBPART B: GENERAL FACILITY STANDARDS  
18

- 19 Section  
20 724.110 Applicability  
21 724.111 USEPA Identification Number  
22 724.112 Required Notices  
23 724.113 General Waste Analysis  
24 724.114 Security  
25 724.115 General Inspection Requirements  
26 724.116 Personnel Training  
27 724.117 General Requirements for Ignitable, Reactive, or Incompatible Wastes  
28 724.118 Location Standards  
29 724.119 Construction Quality Assurance Program  
30

31 SUBPART C: PREPAREDNESS AND PREVENTION  
32

- 33 Section  
34 724.130 Applicability  
35 724.131 Design and Operation of Facility  
36 724.132 Required Equipment  
37 724.133 Testing and Maintenance of Equipment  
38 724.134 Access to Communications or Alarm System  
39 724.135 Required Aisle Space  
40 724.137 Arrangements with Local Authorities  
41

42 SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES  
43

44	Section	
45	724.150	Applicability
46	724.151	Purpose and Implementation of Contingency Plan
47	724.152	Content of Contingency Plan
48	724.153	Copies of Contingency Plan
49	724.154	Amendment of Contingency Plan
50	724.155	Emergency Coordinator
51	724.156	Emergency Procedures

52  
53           SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

54		
55	Section	
56	724.170	Applicability
57	724.171	Use of Manifest System
58	724.172	Manifest Discrepancies
59	724.173	Operating Record
60	724.174	Availability, Retention, and Disposition of Records
61	724.175	Annual Facility Activities Report
62	724.176	Unmanifested Waste Report
63	724.177	Additional Reports

64  
65           SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

66		
67	Section	
68	724.190	Applicability
69	724.191	Required Programs
70	724.192	Groundwater Protection Standard
71	724.193	Hazardous Constituents
72	724.194	Concentration Limits
73	724.195	Point of Compliance
74	724.196	Compliance Period
75	724.197	General Groundwater Monitoring Requirements
76	724.198	Detection Monitoring Program
77	724.199	Compliance Monitoring Program
78	724.200	Corrective Action Program
79	724.201	Corrective Action for Solid Waste Management Units

80  
81           SUBPART G: CLOSURE AND POST-CLOSURE CARE

82		
83	Section	
84	724.210	Applicability
85	724.211	Closure Performance Standard
86	724.212	Closure Plan; Amendment of Plan

87	724.213	Closure; Time Allowed For Closure
88	724.214	Disposal or Decontamination of Equipment, Structures, and Soils
89	724.215	Certification of Closure
90	724.216	Survey Plat
91	724.217	Post-Closure Care and Use of Property
92	724.218	Post-Closure Care Plan; Amendment of Plan
93	724.219	Post-Closure Notices
94	724.220	Certification of Completion of Post-Closure Care

SUBPART H: FINANCIAL REQUIREMENTS

97		
98	Section	
99	724.240	Applicability
100	724.241	Definitions of Terms as Used in This Subpart
101	724.242	Cost Estimate for Closure
102	724.243	Financial Assurance for Closure
103	724.244	Cost Estimate for Post-Closure Care
104	724.245	Financial Assurance for Post-Closure Care
105	724.246	Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care
106		Care
107	724.247	Liability Requirements
108	724.248	Incapacity of Owners or Operators, Guarantors, or Financial Institutions
109	724.251	Wording of the Instruments

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

110		
111		
112		
113	Section	
114	724.270	Applicability
115	724.271	Condition of Containers
116	724.272	Compatibility of Waste with Container
117	724.273	Management of Containers
118	724.274	Inspections
119	724.275	Containment
120	724.276	Special Requirements for Ignitable or Reactive Waste
121	724.277	Special Requirements for Incompatible Wastes
122	724.278	Closure
123	724.279	Air Emission Standards

SUBPART J: TANK SYSTEMS

124		
125		
126		
127	Section	
128	724.290	Applicability
129	724.291	Assessment of Existing Tank System Integrity

- 130 724.292 Design and Installation of New Tank Systems or Components
- 131 724.293 Containment and Detection of Releases
- 132 724.294 General Operating Requirements
- 133 724.295 Inspections
- 134 724.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank
- 135 Systems
- 136 724.297 Closure and Post-Closure Care
- 137 724.298 Special Requirements for Ignitable or Reactive Waste
- 138 724.299 Special Requirements for Incompatible Wastes
- 139 724.300 Air Emission Standards

140

141 SUBPART K: SURFACE IMPOUNDMENTS

142

143 Section

- 144 724.320 Applicability
- 145 724.321 Design and Operating Requirements
- 146 724.322 Action Leakage Rate
- 147 724.323 Response Actions
- 148 724.326 Monitoring and Inspection
- 149 724.327 Emergency Repairs; Contingency Plans
- 150 724.328 Closure and Post-Closure Care
- 151 724.329 Special Requirements for Ignitable or Reactive Waste
- 152 724.330 Special Requirements for Incompatible Wastes
- 153 724.331 Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and
- 154 F027
- 155 724.332 Air Emission Standards

156

157 SUBPART L: WASTE PILES

158

159 Section

- 160 724.350 Applicability
- 161 724.351 Design and Operating Requirements
- 162 724.352 Action Leakage Rate
- 163 724.353 Response Action Plan
- 164 724.354 Monitoring and Inspection
- 165 724.356 Special Requirements for Ignitable or Reactive Waste
- 166 724.357 Special Requirements for Incompatible Wastes
- 167 724.358 Closure and Post-Closure Care
- 168 724.359 Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and
- 169 F027

170

171 SUBPART M: LAND TREATMENT

172

173	Section	
174	724.370	Applicability
175	724.371	Treatment Program
176	724.372	Treatment Demonstration
177	724.373	Design and Operating Requirements
178	724.376	Food-Chain Crops
179	724.378	Unsaturated Zone Monitoring
180	724.379	Recordkeeping
181	724.380	Closure and Post-Closure Care
182	724.381	Special Requirements for Ignitable or Reactive Waste
183	724.382	Special Requirements for Incompatible Wastes
184	724.383	Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and
185		F027

SUBPART N: LANDFILLS

188		
189	Section	
190	724.400	Applicability
191	724.401	Design and Operating Requirements
192	724.402	Action Leakage Rate
193	724.403	Monitoring and Inspection
194	724.404	Response Actions
195	724.409	Surveying and Recordkeeping
196	724.410	Closure and Post-Closure Care
197	724.412	Special Requirements for Ignitable or Reactive Waste
198	724.413	Special Requirements for Incompatible Wastes
199	724.414	Special Requirements for Bulk and Containerized Liquids
200	724.415	Special Requirements for Containers
201	724.416	Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab
202		Packs)
203	724.417	Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, and
204		F027

SUBPART O: INCINERATORS

205		
206		
207		
208	Section	
209	724.440	Applicability
210	724.441	Waste Analysis
211	724.442	Principal Organic Hazardous Constituents (POHCs)
212	724.443	Performance Standards
213	724.444	Hazardous Waste Incinerator Permits
214	724.445	Operating Requirements
215	724.447	Monitoring and Inspections

216	724.451	Closure
217		
218		SUBPART S: SPECIAL PROVISIONS FOR CLEANUP
219		
220	Section	
221	724.650	Applicability of Corrective Action Management Unit Regulations
222	724.651	Grandfathered Corrective Action Management Units
223	724.652	Corrective Action Management Units
224	724.653	Temporary Units
225	724.654	Staging Piles
226	724.655	Disposal of CAMU-Eligible Wastes in Permitted Hazardous Waste Landfills
227		
228		SUBPART W: DRIP PADS
229		
230	Section	
231	724.670	Applicability
232	724.671	Assessment of Existing Drip Pad Integrity
233	724.672	Design and Installation of New Drip Pads
234	724.673	Design and Operating Requirements
235	724.674	Inspections
236	724.675	Closure
237		
238		SUBPART X: MISCELLANEOUS UNITS
239		
240	Section	
241	724.700	Applicability
242	724.701	Environmental Performance Standards
243	724.702	Monitoring, Analysis, Inspection, Response, Reporting, and Corrective Action
244	724.703	Post-Closure Care
245		
246		SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS
247		
248	Section	
249	724.930	Applicability
250	724.931	Definitions
251	724.932	Standards: Process Vents
252	724.933	Standards: Closed-Vent Systems and Control Devices
253	724.934	Test Methods and Procedures
254	724.935	Recordkeeping Requirements
255	724.936	Reporting Requirements
256		
257		SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS
258		

259	Section	
260	724.950	Applicability
261	724.951	Definitions
262	724.952	Standards: Pumps in Light Liquid Service
263	724.953	Standards: Compressors
264	724.954	Standards: Pressure Relief Devices in Gas/Vapor Service
265	724.955	Standards: Sampling Connecting Systems
266	724.956	Standards: Open-ended Valves or Lines
267	724.957	Standards: Valves in Gas/Vapor or Light Liquid Service
268	724.958	Standards: Pumps, Valves, Pressure Relief Devices, and Other Connectors
269	724.959	Standards: Delay of Repair
270	724.960	Standards: Closed-Vent Systems and Control Devices
271	724.961	Alternative Percentage Standard for Valves
272	724.962	Skip Period Alternative for Valves
273	724.963	Test Methods and Procedures
274	724.964	Recordkeeping Requirements
275	724.965	Reporting Requirements

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS,  
SURFACE IMPOUNDMENTS, AND CONTAINERS

279	Section	
280	724.980	Applicability
281	724.981	Definitions
282	724.982	Standards: General
283	724.983	Waste Determination Procedures
284	724.984	Standards: Tanks
285	724.985	Standards: Surface Impoundments
286	724.986	Standards: Containers
287	724.987	Standards: Closed-Vent Systems and Control Devices
288	724.988	Inspection and Monitoring Requirements
289	724.989	Recordkeeping Requirements
290	724.990	Reporting Requirements
291	724.991	Alternative Control Requirements for Tanks (Repealed)

SUBPART DD: CONTAINMENT BUILDINGS

294		
295	Section	
296	724.1100	Applicability
297	724.1101	Design and Operating Standards
298	724.1102	Closure and Post-Closure Care
299		
300		SUBPART EE: HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE
301		

302 Section  
 303 724.1200 Applicability  
 304 724.1201 Design and Operating Standards  
 305 724.1202 Closure and Post-Closure Care  
 306  
 307 724.APPENDIX A Recordkeeping Instructions  
 308 724.APPENDIX B EPA Report Form and Instructions (Repealed)  
 309 724.APPENDIX D Cochran's Approximation to the Behrens-Fisher Student's T-Test  
 310 724.APPENDIX E Examples of Potentially Incompatible Waste  
 311 724.APPENDIX I Groundwater Monitoring List  
 312

313 AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the  
 314 Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].  
 315

316 SOURCE: Adopted in R82-19 at 7 Ill. Reg. 14059, effective October 12, 1983; amended in  
 317 R84-9 at 9 Ill. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1136,  
 318 effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14119, effective August 12, 1986;  
 319 amended in R86-28 at 11 Ill. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 Ill.  
 320 Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 Ill. Reg. 13577, effective August  
 321 4, 1987; amended in R87-5 at 11 Ill. Reg. 19397, effective November 12, 1987; amended in  
 322 R87-39 at 12 Ill. Reg. 13135, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 458,  
 323 effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18527, effective November 13,  
 324 1989; amended in R90-2 at 14 Ill. Reg. 14511, effective August 22, 1990; amended in R90-10 at  
 325 14 Ill. Reg. 16658, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9654,  
 326 effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14572, effective October 1, 1991;  
 327 amended in R91-13 at 16 Ill. Reg. 9833, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg.  
 328 17702, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5806, effective March 26,  
 329 1993; amended in R93-4 at 17 Ill. Reg. 20830, effective November 22, 1993; amended in R93-  
 330 16 at 18 Ill. Reg. 6973, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12487,  
 331 effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17601, effective November 23, 1994;  
 332 amended in R95-6 at 19 Ill. Reg. 9951, effective June 27, 1995; amended in R95-20 at 20 Ill.  
 333 Reg. 11244, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 636,  
 334 effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7638, effective April 15, 1998;  
 335 amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17972, effective September 28, 1998; amended  
 336 in R98-21/R99-2/R99-7 at 23 Ill. Reg. 2186, effective January 19, 1999; amended in R99-15 at  
 337 23 Ill. Reg. 9437, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1146, effective  
 338 January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9833, effective June 20, 2000; expedited  
 339 correction at 25 Ill. Reg. 5115, effective June 20, 2000; amended in R02-1/R02-12/R02-17 at 26  
 340 Ill. Reg. 6635, effective April 22, 2002; amended in R03-7 at 27 Ill. Reg. 3725, effective  
 341 February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6009, effective April 13, 2005; amended in  
 342 R05-2 at 29 Ill. Reg. 6365, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill.  
 343 Reg. 3196, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 893,  
 344 effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. 12365, effective July 14,

2008; amended in R09-3 at 33 Ill. Reg. 1106, effective December 30, 2008; amended in R09-16/R10-4 at 34 Ill. Reg. 18873, effective November 12, 2010; amended in R11-2/R11-16 at 35 Ill. Reg. 17965, effective October 14, 2011; amended in R13-15 at 37 Ill. Reg. 17773, effective October 24, 2013; amended in R15-1 at 39 Ill. Reg. 1724, effective January 12, 2015; amended in R16-7 at 40 Ill. Reg. 11726, effective August 9, 2016; amended in R17-14/R17-15/R18-12 at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART A: GENERAL PROVISIONS

**Section 724.101 Purpose, Scope, and Applicability**

- a) The purpose of this Part is to establish minimum standards that define the acceptable management of hazardous waste.
- b) The standards in this Part apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste, except as specifically provided otherwise in this Part or 35 Ill. Adm. Code 721.
- c) This Part applies to a person disposing of hazardous waste by means of ocean disposal subject to a permit issued pursuant to the federal Marine Protection, Research and Sanctuaries Act (33 USC 1401 et seq.) only to the extent they are included in a RCRA permit by rule granted to such a person pursuant to 35 Ill. Adm. Code 703.141. A "RCRA permit" is a permit required by Section 21(f) of the Environmental Protection Act ~~{415 ILCS 5/21(f)}~~ and 35 Ill. Adm. Code 703.121.  
  
BOARD NOTE: This Part does apply to the treatment or storage of hazardous waste before it is loaded onto an ocean vessel for incineration or disposal at sea.
- d) This Part applies to a person disposing of hazardous waste by means of underground injection subject to a permit issued by the Agency pursuant to Section 12(g) of the Environmental Protection Act ~~{415 ILCS 5/12(g)}~~ only to the extent they are required by Subpart F of 35 Ill. Adm. Code 704.  
  
BOARD NOTE: This Part does apply to the above-ground treatment or storage of hazardous waste before it is injected underground.
- e) This Part applies to the owner or operator of a POTW (publicly owned treatment works) that treats, stores, or disposes of hazardous waste only to the extent included in a RCRA permit by rule granted to such a person pursuant to 35 Ill. Adm. Code 703.141.
- f) This subsection (f) corresponds with 40 CFR 264.1(f), which provides that the

388 federal regulations do not apply to T/S/D activities in authorized states, except  
 389 under limited, enumerated circumstances. This statement maintains structural  
 390 consistency with USEPA rules.

391  
 392 g) This Part does not apply to the following:

393  
 394 1) The owner or operator of a facility permitted by the Agency pursuant to  
 395 Section 21 of the Environmental Protection Act [~~415 ILCS 5/21~~] to  
 396 manage municipal or industrial solid waste, if the only hazardous waste  
 397 the facility treats, stores, or disposes of is excluded from regulation  
 398 pursuant to this Part by 35 Ill. Adm. Code 722.114721.105.

399  
 400 BOARD NOTE: The owner or operator may be subject to 35 Ill. Adm.  
 401 Code 807 and may have to have a supplemental permit pursuant to 35 Ill.  
 402 Adm. Code 807.210.

403  
 404 2) The owner or operator of a facility managing recyclable materials  
 405 described in 35 Ill. Adm. Code 721.106(a)(2) through (a)(4) (except to the  
 406 extent that requirements of this Part are referred to in Subpart C, F, G, or  
 407 H of 35 Ill. Adm. Code 726 or 35 Ill. Adm. Code 739).

408  
 409 3) A generator accumulating waste on-site in compliance with 35 Ill. Adm.  
 410 Code 722.114, 722.115, 722.116, or 722.117722.134.

411  
 412 4) A farmer disposing of waste pesticides from the farmer's own use in  
 413 compliance with 35 Ill. Adm. Code 722.170.

414  
 415 5) The owner or operator of a totally enclosed treatment facility, as defined  
 416 in 35 Ill. Adm. Code 720.110.

417  
 418 6) The owner or operator of an elementary neutralization unit or a  
 419 wastewater treatment unit, as defined in 35 Ill. Adm. Code 720.110,  
 420 provided that if the owner or operator is diluting hazardous ignitable  
 421 (D001) wastes (other than the D001 High TOC Subcategory defined in  
 422 Table T to 35 Ill. Adm. Code 728) or reactive (D003) waste to remove the  
 423 characteristic before land disposal, the owner or operator must comply  
 424 with the requirements set out in Section 724.117(b).

425  
 426 7) This subsection (g)(7) corresponds with 40 CFR 264.1(g)(7), reserved by  
 427 USEPA. This statement maintains structural consistency with USEPA  
 428 rules.

429  
 430 8) Immediate response.

- 431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473
- A) Except as provided in subsection (g)(8)(B) ~~of this Section~~, a person engaged in treatment or containment activities during immediate response to any of the following situations:
    - i) A discharge of a hazardous waste;
    - ii) An imminent and substantial threat of a discharge of hazardous waste;
    - iii) A discharge of a material that becomes a hazardous waste when discharged; or
    - iv) An immediate threat to human health, public safety, property, or the environment from the known or suspected presence of military munitions, other explosive material, or an explosive device, as determined by an explosives or munitions emergency response specialist as defined in 35 Ill. Adm. Code 720.110.
  - B) An owner or operator of a facility otherwise regulated by this Part must comply with all applicable requirements of Subparts C and D ~~of this Part~~.
  - C) Any person that is covered by subsection (g)(8)(A) ~~of this Section~~ and that continues or initiates hazardous waste treatment or containment activities after the immediate response is over is subject to all applicable requirements of this Part and 35 Ill. Adm. Code 702, 703, and 705 for those activities.
  - D) In the case of an explosives or munitions emergency response, if a federal, State, or local official acting within the scope of his or her official responsibilities or an explosives or munitions emergency response specialist determines that immediate removal of the material or waste is necessary to adequately protect human health or the environment, that official or specialist may authorize the removal of the material or waste by transporters that do not have USEPA identification numbers and without the preparation of a manifest. In the case of emergencies involving military munitions, the responding military emergency response specialist's organizational unit must retain records for three years identifying the dates of the response, the responsible persons responding, the type and description of material addressed, and its disposition.

- 474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516
- 9) A transporter storing manifested shipments of hazardous waste in containers meeting 35 Ill. Adm. Code 722.130 at a transfer facility for a period of ten days or less.
  - 10) The addition of absorbent materials to waste in a container (as defined in 35 Ill. Adm. Code 720) or the addition of waste to absorbent material in a container, provided these actions occur at the time waste is first placed in the container, and Sections 724.117(b), 724.271, and 724.272 are complied with.
  - 11) A universal waste handler or universal waste transporter (as defined in 35 Ill. Adm. Code 720.110) that handles any of the wastes listed below is subject to regulation pursuant to 35 Ill. Adm. Code 733 when handling the following universal wastes:
    - A) Batteries, as described in 35 Ill. Adm. Code 733.102;
    - B) Pesticides, as described in 35 Ill. Adm. Code 733.103;
    - C) Mercury-containing equipment, as described in 35 Ill. Adm. Code 733.104; and
    - D) Lamps, as described in 35 Ill. Adm. Code 733.105.
  - h) This Part applies to owners and operators of facilities that treat, store, or dispose of hazardous wastes referred to in 35 Ill. Adm. Code 728.
  - i) 35 Ill. Adm. Code 726.505 identifies when this Part applies to the storage of military munitions classified as solid waste pursuant to 35 Ill. Adm. Code 726.302. The treatment and disposal of hazardous waste military munitions are subject to the applicable permitting, procedural, and technical standards in 35 Ill. Adm. Code 702, 703, 705, 720 through 728, and 738.
  - j) Subparts B, C, and D of this Part and Section 724.201 do not apply to remediation waste management sites. (However, some remediation waste management sites may be a part of a facility that is subject to a traditional RCRA permit because the facility is also treating, storing, or disposing of hazardous wastes that are not remediation wastes. In these cases, Subparts B, C, and D of this Part, and Section 724.201 do apply to the facility subject to the traditional RCRA permit.) Instead of Subparts B, C, and D of this Part, the owner or operator of a remediation waste management site must comply with the following requirements:

- 517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559
- 1) The owner or operator must obtain a USEPA identification number by applying to USEPA Region 5 using USEPA Form 8700-12, as described in Section 724.111;
  - 2) The owner or operator must obtain a detailed chemical and physical analysis of a representative sample of the hazardous remediation wastes to be managed at the site. At a minimum, the analysis must contain all of the information that must be known to treat, store, or dispose of the waste according to this Part and 35 Ill. Adm. Code 728, and the owner or operator must keep the analysis accurate and up to date;
  - 3) The owner or operator must prevent people who are unaware of the danger from entering the site, and the owner or operator must minimize the possibility for unauthorized people or livestock entering onto the active portion of the remediation waste management site, unless the owner or operator can demonstrate the following to the Agency:
    - A) That physical contact with the waste, structures, or equipment within the active portion of the remediation waste management site will not injure people or livestock that may enter the active portion of the remediation waste management site; and
    - B) That disturbance of the waste or equipment by people or livestock that enter onto the active portion of the remediation waste management site will not cause a violation of the requirements of this Part;
  - 4) The owner or operator must inspect the remediation waste management site for malfunctions, deterioration, operator errors, and discharges that may be causing or may lead to a release of hazardous waste constituents to the environment or a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment, and the owner or operator must remedy the problem before it leads to a human health or environmental hazard. Where a hazard is imminent or has already occurred, the owner or operator must immediately take remedial action;
  - 5) The owner or operator must provide personnel with classroom or on-the-job training on how to perform their duties in a way that ensures the remediation waste management site complies with this Part, and on how to respond effectively to emergencies;

- 560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602
- 6) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste, and the owner or operator must prevent threats to human health and the environment from ignitable, reactive, and incompatible waste;
  - 7) For remediation waste management sites subject to regulation under Subparts I through O and Subpart X ~~of this Part~~, the owner or operator must design, construct, operate, and maintain a unit within a 100-year floodplain to prevent washout of any hazardous waste by a 100-year flood, unless the owner or operator can meet the requirements of Section 724.118(b);
  - 8) The owner or operator must not place any non-containerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave;
  - 9) The owner or operator must develop and maintain a construction quality assurance program for all surface impoundments, waste piles, and landfill units that are required to comply with Sections 724.321(c) and (d), 724.351(c) and (d), and 724.401(c) and (d) at the remediation waste management site, according to Section 724.119;
  - 10) The owner or operator must develop and maintain procedures to prevent accidents and a contingency and emergency plan to control accidents that occur. These procedures must address proper design, construction, maintenance, and operation of remediation waste management units at the site. The goal of the plan must be to minimize the possibility of, and the hazards from, a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water that could threaten human health or the environment. The plan must explain specifically how to treat, store, and dispose of the hazardous remediation waste in question, and must be implemented immediately whenever a fire, explosion, or release of hazardous waste or hazardous waste constituents occurs that could threaten human health or the environment;
  - 11) The owner or operator must designate at least one employee, either on the facility premises or on call (that is, available to respond to an emergency by reaching the facility quickly), to coordinate all emergency response measures. This emergency coordinator must be thoroughly familiar with all aspects of the facility's contingency plan, all operations and activities at the facility, the location and characteristics of waste handled, the location of all records within the facility, and the facility layout. In addition, this

603 person must have the authority to commit the resources needed to carry  
604 out the contingency plan;

605  
606 12) The owner or operator must develop, maintain, and implement a plan to  
607 meet the requirements in subsections (j)(2) through (j)(6) and (j)(9)  
608 through (j)(10) of this Section; and

609  
610 13) The owner or operator must maintain records documenting compliance  
611 with subsections (j)(1) through (j)(12) of this Section.

612  
613 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

614  
615 **Section 724.103 Relationship to Interim Status Standards**

616  
617 A facility owner or operator that has fully complied with the requirements for interim status – as  
618 defined in Section 3005(e) of RCRA and regulations under Subpart C of 35 Ill. Adm. Code 703  
619 must comply with the regulations specified in 35 Ill. Adm. Code 725 in lieu of the regulations in  
620 this Part, until final administrative disposition of his permit application is made, except as  
621 provided under Subpart S of this Part.

622  
623 BOARD NOTE: As stated in Section 21(f) of the Illinois Environmental Protection Act [415  
624 ILCS 5/21(f)], the treatment, storage or disposal of hazardous waste is prohibited, except in  
625 accordance with a RCRA permit. 35 Ill. Adm. Code 703, Subpart C provides for the continued  
626 operation of an existing facility that meets certain conditions until final administrative  
627 disposition of the owner's or operator's permit application.

628  
629 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

630  
631 **SUBPART B: GENERAL FACILITY STANDARDS**

632  
633 **Section 724.110 Applicability**

634  
635 a) The regulations in this Subpart B apply to owners and operators of all hazardous  
636 waste facilities, except as provided in Section 724.101 and subsection (b) of this  
637 Section.

638  
639 b) Section 724.118(b) applies only to facilities subject to regulation under Subparts I  
640 through O and Subpart X of this Part.

641  
642 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

643  
644 **Section 724.112 Required Notices**

645

- 646 a) Receipt from a foreign source.  
 647  
 648 a+) The owner or operator of a facility that is arranging has arranged to receive  
 649 hazardous waste subject to Subpart H of 35 Ill. Adm. Code 722 from a foreign  
 650 source must ~~submit~~notify the following required notices:~~Regional Administrator~~  
 651 in writing at least four weeks in advance of the date the waste is expected to arrive  
 652 at the facility. Notice of subsequent shipments of the same waste from the same  
 653 foreign source is not required.  
 654  
 655 1) As required by 35 Ill. Adm. Code 722.184(b), for imports where the  
 656 competent authority of the country of export does not require the foreign  
 657 exporter to submit to it a notification proposing export and obtain consent  
 658 from USEPA and the competent authorities for the countries of transit,  
 659 such owner or operator of the facility, if acting as the importer, must  
 660 provide notification of the proposed transboundary movement in English  
 661 to USEPA using the allowable methods listed in 35 Ill. Adm. Code  
 662 722.182(e) at least 60 days before the first shipment is expected to depart  
 663 the country of export. The notification may cover up to one year of  
 664 shipments of wastes having similar physical and chemical characteristics;  
 665 the same United Nations/USDOT identification number from the  
 666 Hazardous Materials Table in 49 CFR 172.101, incorporated by reference  
 667 in 35 Ill. Adm. Code 720.111; the same USEPA hazardous waste numbers  
 668 (from Subpart C or D of 35 Ill. Adm. Code 721); the waste codes from the  
 669 lists in the OECD Guidance Manual, incorporated by reference in 35 Ill.  
 670 Adm. Code 720.111; and being sent from the same foreign exporter.  
 671  
 672 2) As required by 35 Ill. Adm. Code 722.184(d)(2)(O),~~The owner or operator~~  
 673 ~~of a recovery facility that has arranged to receive hazardous waste subject~~  
 674 ~~to Subpart H of 35 Ill. Adm. Code 722 must provide a copy of the~~  
 675 ~~movement document bearing all required signatures to the foreign~~  
 676 ~~exporter, to the Office of Enforcement and Compliance Assurance, Office~~  
 677 ~~of Federal Activities, International Compliance, Environmental Protection~~  
 678 ~~Agency, Washington, DC 20460; to the Bureau of Land, Division of Land~~  
 679 ~~Pollution Control, Illinois Environmental Protection Agency, P.O. Box~~  
 680 ~~19276, Springfield, IL 62794-9276; and to the competent authorities of all~~  
 681 ~~other countries concerned within three working days after receipt of the~~  
 682 ~~shipment to the foreign exporter; to the competent authorities of the~~  
 683 ~~countries of export and transit that control the shipment as an export and~~  
 684 ~~transit shipment of hazardous waste, respectively; and, on or after the~~  
 685 ~~electronic import-export reporting compliance date, to USEPA~~  
 686 ~~electronically using USEPA's Waste Import Export Tracking System~~  
 687 ~~(WIETS). The original of the signed movement document must be~~  
 688 ~~maintained at the facility for at least three years. The owner or operator of~~

689 a facility may satisfy this recordkeeping requirement by retaining  
 690 electronically submitted documents in the facility's account on USEPA's  
 691 WIETS, provided that copies are readily available for viewing and  
 692 production if requested by any USEPA or Agency inspector. No owner or  
 693 operator of a facility may be held liable for the inability to produce the  
 694 documents for inspection under this section if the owner or operator of a  
 695 facility can demonstrate that the inability to produce the document is due  
 696 exclusively to technical difficulty with USEPA's WIETS for which the  
 697 owner or operator of a facility bears no responsibility. In addition, such  
 698 owner or operator must send a certificate of recovery to the foreign  
 699 exporter, to the competent authority of the country of export, to USEPA's  
 700 Office of Enforcement and Compliance Assurance at the above address by  
 701 mail, by e-mail without a digital signature followed by mail, or by fax  
 702 followed by mail. The owner or operator must complete this sending of a  
 703 certificate of recovery as soon as possible, but no later than 30 days after  
 704 the completion of recovery, and no later than one calendar year following  
 705 the receipt of the hazardous waste.  
 706

707 3) As required by 35 Ill. Adm. Code 722.184(f)(4), if the facility has physical  
 708 control of the waste and it must be sent to an alternate facility or returned  
 709 to the country of export, such owner or operator of the facility must inform  
 710 USEPA, using the allowable methods listed in 35 Ill. Adm. Code  
 711 722.184(b)(1) of the need to return or arrange alternate management of the  
 712 shipment.  
 713

714 4) As required by 35 Ill. Adm. Code 722.184(g), such owner or operator  
 715 must do the following:  
 716

717 A) The owner or operator must send copies of the signed and dated  
 718 confirmation of recovery or disposal, as soon as possible, but no  
 719 later than thirty days after completing recovery or disposal on the  
 720 waste in the shipment and no later than one calendar year  
 721 following receipt of the waste, to the foreign exporter, to the  
 722 competent authority of the country of export that controls the  
 723 shipment as an export of hazardous waste. For shipments recycled  
 724 or disposed of on or after the electronic import-export reporting  
 725 compliance date, to USEPA electronically using USEPA's WIETS.  
 726

727 B) If the facility performed any of recovery operations R12, R13, or  
 728 RC16 or disposal operations D13 through D15 or DC17, the owner  
 729 or operator must promptly, within one year of shipment delivery to  
 730 the final recovery or disposal facility that performed one of  
 731 recovery operations R1 through R11 or RC16 or one of disposal

732 operations D1 through D12 or DC15 or DC16, send copies of the  
 733 confirmation of recovery or disposal that it receives from the final  
 734 recovery or disposal facility to the competent authority of the  
 735 country of export that controls the shipment as an export of  
 736 hazardous waste. On or after the electronic import-export  
 737 reporting compliance date, the owner or operator must make this  
 738 submission to USEPA electronically using USEPA's WIETS. The  
 739 recovery and disposal operations in this subsection (a)(4)(B) are  
 740 defined in 35 Ill. Adm. Code 722.181.  
 741

- 742 b) The owner or operator of a facility that receives hazardous waste from an off-site  
 743 source (except where the owner or operator is also the generator) must inform the  
 744 generator in writing that the owner or operator has the appropriate permits for,  
 745 and will accept, the waste that the generator is shipping. The owner or operator  
 746 must keep a copy of this written notice as part of the operating record.  
 747
- 748 c) Before transferring ownership or operation of a facility during its operating life,  
 749 or of a disposal facility during the post-closure care period, the owner or operator  
 750 must notify the new owner or operator in writing of the requirements of this Part  
 751 and 35 Ill. Adm. Code 702 and 703.  
 752

753 BOARD NOTE: An owner's or operator's failure to notify the new owner or  
 754 operator of the requirements of this Part in no way relieves the new owner or  
 755 operator of his obligation to comply with all applicable requirements.  
 756

757 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 758

759 **Section 724.113 General Waste Analysis**  
 760

- 761 a) Analysis:  
 762
- 763 1) Before an owner or operator treats, stores, or disposes of any hazardous  
 764 wastes, or non-hazardous wastes if applicable under Section 724.213(d),  
 765 the owner or operator must obtain a detailed chemical and physical  
 766 analysis of a representative sample of the wastes. At a minimum, the  
 767 analysis must contain all the information that must be known to treat,  
 768 store, or dispose of the waste in accordance with this Part and 35 Ill. Adm.  
 769 Code 728.  
 770
- 771 2) The analysis may include data developed under 35 Ill. Adm. Code 721 and  
 772 existing published or documented data on the hazardous waste or on  
 773 hazardous waste generated from similar processes.  
 774

775 BOARD NOTE: For example, the facility's records of analyses performed  
 776 on the waste before the effective date of these regulations or studies  
 777 conducted on hazardous waste generated from processes similar to that  
 778 which generated the waste to be managed at the facility may be included  
 779 in the data base required to comply with subsection (a)(1) ~~of this Section~~.  
 780 The owner or operator of an off-site facility may arrange for the generator  
 781 of the hazardous waste to supply part or all of the information required by  
 782 subsection (a)(1) ~~of this Section~~, except as otherwise specified in 35 Ill.  
 783 Adm. Code 728.107(b) and (c). If the generator does not supply the  
 784 information, and the owner or operator chooses to accept a hazardous  
 785 waste, the owner or operator is responsible for obtaining the information  
 786 required to comply with this Section.  
 787

788 3) The analysis must be repeated as necessary to ensure that it is accurate and  
 789 up to date. At a minimum, the analysis must be repeated as follows:

791 A) When the owner or operator is notified, or has reason to believe,  
 792 that the process or operation generating the hazardous waste, or  
 793 non-hazardous waste if applicable under Section 724.213(d), has  
 794 changed; and

795  
 796 B) For off-site facilities, when the results of the inspection required in  
 797 subsection (a)(4) ~~of this Section~~ indicate that the hazardous waste  
 798 received at the facility does not match the waste designated on the  
 799 accompanying manifest or shipping paper.

800  
 801 4) The owner or operator of an off-site facility must inspect and, if necessary,  
 802 analyze each hazardous waste shipment received at the facility to  
 803 determine whether it matches the identity of the waste specified on the  
 804 accompanying manifest or shipping paper.

805  
 806 b) The owner or operator must develop and follow a written waste analysis plan that  
 807 describes the procedures that it will carry out to comply with subsection (a) ~~of this~~  
 808 ~~Section~~. The owner or operator must keep this plan at the facility. At a  
 809 minimum, the plan must specify the following:

810  
 811 1) The parameters for which each hazardous waste, or non-hazardous waste  
 812 if applicable under Section 724.213(d), will be analyzed and the rationale  
 813 for the selection of these parameters (i.e., how analysis for these  
 814 parameters will provide sufficient information on the waste's properties to  
 815 comply with subsection (a) ~~of this Section~~).

816  
 817 2) The test methods that will be used to test for these parameters.

818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860

- 3) The sampling method that will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either of the following:
  - A) One of the sampling methods described in Appendix A to 35 Ill. Adm. Code 721; or
  - B) An equivalent sampling method.

BOARD NOTE: See 35 Ill. Adm. Code 720.121.
- 4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date.
- 5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.
- 6) Where applicable, the methods that will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections 724.117, 724.414, 724.441, 724.934(d), 724.963(d), and 724.983 and 35 Ill. Adm. Code 728.107.
- 7) For surface impoundments exempted from land disposal restrictions under 35 Ill. Adm. Code 728.104(a), the procedures and schedules for the following:
  - A) The sampling of impoundment contents;
  - B) The analysis of test data; and
  - C) The annual removal of residues that are not delisted under 35 Ill. Adm. Code 720.122 or which exhibit a characteristic of hazardous waste and either of the following is true of the waste:
    - i) The residues do not meet applicable treatment standards of Subpart D of 35 Ill. Adm. Code 728; or
    - ii) Where no treatment standards have been established, such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.132 or 728.139 or such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.133(f).

861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903

- 8) For owners and operators seeking an exemption to the air emission standards of Subpart CC of this Part in accordance with Section 724.982, the following information:
  - A) If direct measurement is used for the waste determination, the procedures and schedules for waste sampling and analysis and the analysis of test data to verify the exemption.
  - B) If knowledge of the waste is used for the waste determination, any information prepared by the facility owner or operator or by the generator of the waste, if the waste is received from off-site, that is used as the basis for knowledge of the waste.
- c) For off-site facilities, the waste analysis plan required in subsection (b) of this Section must also specify the procedures that will be used to inspect and, if necessary, analyze each shipment of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe the following:
  - 1) The procedures that will be used to determine the identity of each movement of waste managed at the facility;
  - 2) The sampling method that will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling; and
  - 3) The procedures that the owner or operator of an off-site landfill receiving containerized hazardous waste will use to determine whether a hazardous waste generator or treater has added a biodegradable sorbent to the waste in the container.

BOARD NOTE: 35 Ill. Adm. Code 703 requires that the waste analysis plan be submitted with Part B of the permit application.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.114 Security**

- a) The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility, unless the owner or operator demonstrates the following to the Agency:

- 904  
905  
906  
907  
908  
909  
910  
911  
912
- 1) That physical contact with the waste, structures or equipment within the active portion of the facility will not injure unknowing or unauthorized persons or livestock that may enter the active portion of a facility; and
  - 2) That disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, will not cause a violation of the requirements of this Part.

913 BOARD NOTE: 35 Ill. Adm. Code 703 requires that an owner or operator who  
914 wishes to make the demonstration referred to above must do so with Part B of the  
915 permit application.

- 916  
917 b) Unless the owner or operator has made a successful demonstration under  
918 subsections (a)(1) and (a)(2) of this Section, a facility must have the following:  
919
- 920 1) A 24-hour surveillance system (e.g., television monitoring or surveillance  
921 by guards or facility personnel) that continuously monitors and controls  
922 entry onto the active portion of the facility; or
  - 923 2) Physical barriers.
    - 924 A) An artificial or natural barrier (e.g., a fence in good repair or a  
925 fence combined with a cliff), which completely surrounds the  
926 active portion of the facility; and
    - 927 B) A means to control entry, at all times, through the gates or other  
928 entrances to the active portion of the facility (e.g., an attendant,  
929 television monitors, locked entrance, or controlled roadway access  
930 to the facility).

931  
932  
933  
934  
935 BOARD NOTE: The requirements of subsection (b) of this Section are satisfied  
936 if the facility or plant within which the active portion is located itself has a  
937 surveillance system, or a barrier and a means to control entry, that complies with  
938 the requirements of subsection (b)(1) or (b)(2) of this Section.

- 939  
940 c) Unless the owner or operator has made a successful demonstration under  
941 subsections (a)(1) and (a)(2) of this Section, a sign with the legend, "Danger –  
942 Unauthorized Personnel Keep Out," must be posted at each entrance to the active  
943 portion of a facility, and at other locations, in sufficient numbers to be seen from  
944 any approach to this active portion. The sign must be legible from a distance of at  
945 least 25 feet. Existing signs with a legend other than "Danger – Unauthorized  
946 Personnel Keep Out" may be used if the legend on the sign indicates that only

947 authorized personnel are allowed to enter the active portion, and that entry onto  
948 the active portion can be dangerous.

949  
950 BOARD NOTE: See Section 724.217(b) for discussion of security requirements at  
951 disposal facilities during the post-closure care period.

952  
953 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
954

955 **Section 724.115 General Inspection Requirements**

- 956
- 957 a) The owner or operator must conduct inspections often enough to identify  
958 problems in time to correct them before they harm human health or the  
959 environment. The owner or operator must inspect the facility for malfunctions  
960 and deterioration, operator errors, and discharges that may be causing or may lead  
961 to either of the following:  
962
    - 963 1) Release of hazardous waste constituents to the environment; or
    - 964 2) A threat to human health.
  - 965 b) Inspection schedule.  
966
    - 967 1) The owner or operator must develop and follow a written schedule for  
968 inspecting monitoring equipment, safety and emergency equipment,  
969 security devices, and operating and structural equipment (such as dikes  
970 and sump pumps) that are important to preventing, detecting, or  
971 responding to environmental or human health hazards.  
972
    - 973 2) The owner or operator must keep this schedule at the facility.  
974
    - 975 3) The schedule must identify the types of problems (e.g., malfunctions or  
976 deterioration) that are to be looked for during the inspection (e.g.,  
977 inoperative sump pump, leaking fitting, eroding dike, etc.).  
978
    - 979 4) The frequency of inspection may vary for the items on the schedule.  
980 However, the frequency should be based on the rate of deterioration of the  
981 equipment and the probability of an environmental or human health  
982 incident if the deterioration, malfunction, or operator error goes  
983 undetected between inspections. Areas subject to spills, such as loading  
984 and unloading areas, must be inspected daily when in use. At a minimum,  
985 the inspection schedule must include the items and frequencies called for  
986 in Sections 724.274, 724.293, 724.295, 724.326, 724.354, 724.378,  
987 724.403, 724.447, 724.702, 724.933, 724.952, 724.953, 724.958, and  
988  
989

990 724.983 through 724.990, where applicable. 35 Ill. Adm. Code 703  
991 requires the inspection schedule to be submitted with Part B of the permit  
992 application. The Agency must evaluate the schedule along with the rest of  
993 the application to ensure that it adequately protects human health and the  
994 environment. As part of this review, the Agency may modify or amend  
995 the schedule as may be necessary.  
996  
997

998 ~~BOARD NOTE: 35 Ill. Adm. Code 703 requires the inspection schedule~~  
999 ~~to be submitted with Part B of the permit application. The Agency must~~  
1000 ~~evaluate the schedule along with the rest of the application to ensure that it~~  
1001 ~~adequately protects human health and the environment. As part of this~~  
1002 ~~review, the Agency may modify or amend the schedule as may be~~  
1003 ~~necessary.~~  
1004

1005 5) This subsection (b)(5) corresponds with 40 CFR 264.15(b)(5), which  
1006 became obsolete when USEPA terminated the Performance Track  
1007 Program at 74 Fed. Reg. 22741 (May 14, 2009). USEPA has recognized  
1008 that program-related rules are no longer effective at 75 Fed. Reg. 12989,  
1009 12992, note 1 (Mar. 18, 2010). This statement maintains structural  
1010 consistency with the corresponding federal requirements.  
1011

1012 c) The owner or operator must remedy any deterioration or malfunction of  
1013 equipment or structures that the inspection reveals on a schedule which ensures  
1014 that the problem does not lead to an environmental or human health hazard.  
1015 Where a hazard is imminent or has already occurred, remedial action must be  
1016 taken immediately.  
1017

1018 d) The owner or operator must record inspections in an inspection log or summary.  
1019 The owner or operator must keep these records for at least three years from the  
1020 date of inspection. At a minimum, these records must include the date and time  
1021 of the inspection, the name of the inspector, a notation of the observations made  
1022 and the date, and nature of any repairs or other remedial actions.  
1023

1024 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
1025

1026 **Section 724.116 Personnel Training**  
1027

1028 a) The personnel training program.  
1029

1030 1) Facility personnel must successfully complete a program of classroom  
1031 instruction or on-the-job training that teaches them to perform their duties  
1032 in a way that ensures the facility's compliance with the requirements of

1033 this Part. The owner or operator must ensure that this program includes all  
1034 the elements described in the document required under subsection (d)(3)  
1035 of this Section.  
1036

1037 BOARD NOTE: 35 Ill. Adm. Code 703 requires that owners and  
1038 operators submit with Part B of the RCRA permit application, an outline  
1039 of the training program used (or to be used) at the facility and a brief  
1040 description of how the training program is designed to meet actual jobs  
1041 tasks.  
1042

1043 2) This program must be directed by a person trained in hazardous waste  
1044 management procedures, and must include instruction that teaches facility  
1045 personnel hazardous waste management procedures (including  
1046 contingency plan implementation) relevant to the positions in which they  
1047 are employed.  
1048

1049 3) At a minimum, the training program must be designed to ensure that  
1050 facility personnel are able to respond effectively to emergencies by  
1051 familiarizing them with emergency procedures, emergency equipment,  
1052 and emergency systems, including, where applicable:  
1053

1054 A) Procedures for using, inspecting, repairing, and replacing facility  
1055 emergency and monitoring equipment;  
1056

1057 B) Key parameters for automatic waste feed cut-off systems;  
1058

1059 C) Communications or alarm systems;  
1060

1061 D) Response to fires or explosions;  
1062

1063 E) Response to groundwater contamination incidents; and  
1064

1065 F) Shutdown of operations.  
1066

1067 4) For facility employees that have receive emergency response training  
1068 pursuant to the federal Occupational Safety and Health Administration  
1069 (OSHA) regulations at 29 CFR 1910.120(p)(8) and (q), the facility is not  
1070 required to provide separate emergency response training pursuant to this  
1071 Section, provided that the overall facility OSHA emergency response  
1072 training meets all the requirements of this Section.  
1073

1074 b) Facility personnel must successfully complete the program required in subsection  
1075 (a) of this Section within six months after the effective date of these regulations or

1076 six months after the date of their employment or assignment to a facility, or to a  
 1077 new position at a facility, whichever is later. Employees hired after the effective  
 1078 date of these regulations must not work in unsupervised positions until they have  
 1079 completed the training requirements of subsection (a) ~~of this Section.~~

- 1080
- 1081 c) Facility personnel must take part in an annual review of the initial training  
 1082 required in subsection (a) ~~of this Section.~~
  - 1083
  - 1084 d) The owner or operator must maintain the following documents and records at the  
 1085 facility:
  - 1086
  - 1087 1) The job title for each position at the facility related to hazardous waste  
 1088 management, and the name of the employee filling each job;
  - 1089
  - 1090 2) A written job description for each position listed under subsection (d)(1)  
 1091 ~~of this Section.~~ This description may be consistent in its degree of  
 1092 specificity with descriptions for other similar positions in the same  
 1093 company location or bargaining unit, but must include the requisite skill,  
 1094 education or other qualifications, and duties of employees assigned to each  
 1095 position;
  - 1096
  - 1097 3) A written description of the type and amount of both introductory and  
 1098 continuing training that will be given to each person filling a position  
 1099 listed under subsection (d)(1) ~~of this Section;~~
  - 1100
  - 1101 4) Records that document that the training or job experience required under  
 1102 subsections (a), (b), and (c) ~~of this Section~~ has been given to, and  
 1103 completed by, facility personnel.
  - 1104
  - 1105 e) Training records on current personnel must be kept until closure of the facility;  
 1106 training records on former employees must be kept for at least three years from  
 1107 the date the employee last worked at the facility. Personnel training records may  
 1108 accompany personnel transferred within the same company.

1109  
 1110 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

1111  
 1112 **Section 724.117 General Requirements for Ignitable, Reactive or Incompatible Wastes**

- 1113
- 1114 a) The owner or operator must take precautions to prevent accidental ignition or  
 1115 reaction of ignitable or reactive waste. This waste must be separated and  
 1116 protected from sources of ignition or reaction including but not limited to: open  
 1117 flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static,  
 1118 electrical or mechanical), spontaneous ignition (e.g., from heat-producing

1119 chemical reactions), and radiant heat. While ignitable or reactive waste is being  
1120 handled, the owner or operator must confine smoking and open flame to specially  
1121 designated locations. "No Smoking" signs must be conspicuously placed  
1122 wherever there is a hazard from ignitable or reactive waste.

1123  
1124 b) Where specifically required by this Part, the owner or operator of a facility that  
1125 treats, stores or disposes ignitable or reactive waste, or mixes incompatible waste  
1126 and other materials, must take precautions to prevent reactions that do the  
1127 following:

- 1128
- 1129 1) Generate extreme heat or pressure, fire or explosions, or violent reactions;
- 1130
- 1131 2) Produce uncontrolled toxic mists, fumes, dusts or gases in sufficient
- 1132 quantities to threaten human health or the environment;
- 1133
- 1134 3) Produce uncontrolled flammable fumes or gases in sufficient quantities to
- 1135 pose a risk of fire or explosions;
- 1136
- 1137 4) Damage the structural integrity of the device or facility;
- 1138
- 1139 5) Through other like means threaten human health or the environment.

1140  
1141 c) When required to comply with ~~subsections~~subsections (a) or (b) of this Section, the  
1142 owner or operator must document that compliance. This documentation may be  
1143 based on references to published scientific or engineering literature, data from  
1144 trial tests (e.g., bench scale or pilot scale tests), waste analyses (as specified in  
1145 Section 724.113), or the results of the treatment of similar wastes by similar  
1146 treatment processes and under similar operating conditions.

1147  
1148 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

1149  
1150 **Section 724.118 Location Standards**

- 1151 a) Seismic considerations.
- 1152
- 1153
- 1154 1) Portions of new facilities where treatment, storage or disposal of
- 1155 hazardous waste will be conducted must not be located within 61 meters
- 1156 (200 feet) of a fault that has had displacement in Holocene time.
- 1157
- 1158 2) As used in subsection (a)(1) ~~of this Section~~:
- 1159
- 1160 A) "Fault" means a fracture along which rocks on one side have been
- 1161 displaced with respect to those on the other side.

1162  
1163  
1164  
1165  
1166  
1167  
1168  
1169  
1170  
1171  
1172  
1173  
1174  
1175  
1176  
1177  
1178  
1179  
1180  
1181  
1182  
1183  
1184  
1185  
1186  
1187  
1188  
1189  
1190  
1191  
1192  
1193  
1194  
1195  
1196  
1197  
1198  
1199  
1200  
1201  
1202  
1203  
1204

- 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 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-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;

- 1205  
1206  
1207 2) As used in subsection (b)(1) ~~of this Section:~~  
1208  
1209 A) "100-year floodplain" means any land area that is subject to a one  
1210 percent or greater chance of flooding in any given year from any  
1211 source.  
1212  
1213 B) "Washout" means the movement of hazardous waste from the  
1214 active portion of the facility as a result of flooding.  
1215  
1216 C) "100-year flood" means a flood that has a one percent chance of  
1217 being equalled or exceeded in any given year.  
1218

1219 BOARD NOTE: Requirements pertaining to other federal laws that affect  
1220 the location and permitting of facilities are found in 40 CFR 270.3. For  
1221 details relative to these laws, see ~~USEPA's~~EPA's manual for SEA (special  
1222 environmental area) requirements for hazardous waste facility permits.  
1223 Though ~~USEPA~~EPA is responsible for complying with these  
1224 requirements, applicants are advised to consider them in planning the  
1225 location of a facility to help prevent subsequent project delays. Facilities  
1226 may be required to obtain from the Illinois Department of Transportation  
1227 on a permit or certification that a facility is flood-protected.  
1228

- 1229 c) Salt dome formations, salt bed formations, underground mines and caves. The  
1230 placement of any non-containerized or bulk liquid hazardous waste in any salt  
1231 dome formation, salt bed formation, underground cave or mine is prohibited.  
1232

1233 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
1234

1235 **Section 724.119 Construction Quality Assurance Program**  
1236

- 1237 a) Construction quality assurance (CQA) program.  
1238  
1239 1) A CQA program is required for all surface impoundment, waste pile and  
1240 landfill units that are required to comply with Sections 724.321(c) and (d),  
1241 724.351(c) and (d), and 724.401(c) and (d). The program must ensure that  
1242 the constructed unit meets or exceeds all design criteria and specifications  
1243 in the permit. The program must be developed and implemented under the  
1244 direction of a CQA officer who is a registered professional engineer.  
1245  
1246 2) The CQA program must address the following physical components,  
1247 where applicable:

- 1248  
1249  
1250  
1251  
1252  
1253  
1254  
1255  
1256  
1257  
1258  
1259  
1260  
1261  
1262  
1263  
1264  
1265  
1266  
1267  
1268  
1269  
1270  
1271  
1272  
1273  
1274  
1275  
1276  
1277  
1278  
1279  
1280  
1281  
1282  
1283  
1284  
1285  
1286  
1287  
1288  
1289  
1290
- A) Foundations;
  - B) Dikes;
  - C) Low-permeability soil liners;
  - D) Geomembranes (flexible membrane liners);
  - E) Leachate collection and removal systems and leak detection systems; and
  - F) Final cover systems.
- b) Written CQA plan. The owner or operator of units subject to the CQA program under subsection (a) ~~of this Section~~ must develop and implement a written CQA plan. The plan must identify steps that will be used to monitor and document the quality of materials and the condition and manner of their installation. The CQA plan must include the following:
- 1) Identification of applicable units, and a description of how they will be constructed.
  - 2) Identification of key personnel in the development and implementation of the CQA plan, and CQA officer qualifications.
  - 3) A description of inspection and sampling activities for all unit components identified in subsection (a)(2) ~~of this Section~~, including observations and tests that will be used before, during and after construction to ensure that the construction materials and the installed unit components meet the design specifications. The description must cover: Sampling size and locations; frequency of testing; data evaluation procedures; acceptance and rejection criteria for construction materials; plans for implementing corrective measures; and data or other information to be recorded and retained in the operating record under Section 724.173.
- c) Contents of program.
- 1) The CQA program must include observations, inspections, tests and measurements sufficient to ensure the following:
    - A) Structural stability and integrity of all components of the unit identified in subsection (a)(2) ~~of this Section~~;

1291  
1292  
1293  
1294  
1295  
1296  
1297  
1298  
1299  
1300  
1301  
1302  
1303  
1304  
1305  
1306  
1307  
1308  
1309  
1310  
1311  
1312  
1313  
1314  
1315  
1316  
1317  
1318  
1319  
1320  
1321  
1322  
1323  
1324  
1325  
1326  
1327  
1328  
1329  
1330  
1331  
1332  
1333

- B) Proper construction of all components of the liners, leachate collection and removal system, leak detection system and final cover system, according to permit specifications and good engineering practices and proper installation of all components (e.g., pipes) according to design specifications;
- C) Conformity of all materials used with design and other material specifications under Sections 724.321, 724.351, and 724.401.

2) The CQA program must include test fills for compacted soil liners, using the same compaction methods as in the full scale unit, to ensure that the liners are constructed to meet the hydraulic conductivity requirements of Sections 724.321(c)(1)(A)(ii), 724.351(c)(1)(A)(ii), or 724.401(c)(1)(A)(ii) in the field. Compliance with the hydraulic conductivity requirements must be verified by using in-situ testing on the constructed test fill. The Agency must accept an alternative demonstration, in lieu of a test fill, where data are sufficient to show that a constructed soil liner will meet the hydraulic conductivity requirements of Sections 724.321(c)(1)(A)(ii), 724.351(c)(1)(A)(ii), or 724.401(c)(1)(A)(ii) in the field.

d) Certification. Waste must not be received in a unit subject to Section 724.119 until the owner or operator has submitted to the Agency by certified mail or hand delivery a certification signed by the CQA officer that the approved CQA plan has been successfully carried out and that the unit meets the requirements of Sections 724.321(c) or (d), 724.351(c) or (d), or 724.401(c) or (d); and the procedure in 35 Ill. Adm. Code 703.247(b) has been completed. Documentation supporting the CQA officer's certification must be furnished to the Agency upon request.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**SUBPART C: PREPAREDNESS AND PREVENTION**

**Section 724.132 Required Equipment**

~~All~~ facilities must be equipped with the following, unless the owner or operator demonstrates to the Agency that none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below:

- a) An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;

- 1334
- 1335           b)    A device, such as a telephone (immediately available at the scene of operations)
- 1336                    or a hand-held two-way radio, capable of summoning emergency assistance from
- 1337                    local police departments, fire departments, or State or local emergency response
- 1338                    teams;
- 1339
- 1340           c)    Portable fire extinguishers, fire control equipment (including special
- 1341                    extinguishing equipment, such as that using foam, inert gas, or dry chemicals),
- 1342                    spill control equipment and decontamination equipment; and
- 1343
- 1344           d)    Water at adequate volume and pressure to supply water hose streams, or foam
- 1345                    producing equipment, or automatic sprinklers or water spray systems.
- 1346

1347 BOARD NOTE: 35 Ill. Adm. Code 703 requires that an owner or operator who wishes to make  
1348 the demonstration referred to above must do so with Part B of the permit application.

1349  
1350           (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

1351  
1352 **Section 724.133 Testing and Maintenance of Equipment**

1353  
1354 ~~All~~ facility communications or alarm systems, fire protection equipment, spill control  
1355 equipment, and decontamination equipment, where required, must be tested and maintained as  
1356 necessary to assure its proper operation in time of emergency.

1357  
1358           (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

1359  
1360           SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

1361  
1362 **Section 724.156 Emergency Procedures**

- 1363
- 1364           a)    Whenever there is an imminent or actual emergency situation, the emergency
- 1365                    coordinator (or the designee when the emergency coordinator is on call) must
- 1366                    immediately do the following:
- 1367                    1)    He or she must activate internal facility alarms or communication systems,
- 1368                                where applicable, to notify all facility personnel; and
- 1369                    2)    He or she must notify appropriate State or local agencies with designated
- 1370                                response roles if their help is needed.
- 1371
- 1372
- 1373
- 1374           b)    Whenever there is a release, fire, or explosion, the emergency coordinator must
- 1375                    immediately identify the character, exact source, amount, and areal extent of any
- 1376                    released materials. The emergency coordinator may do this by observation or

- 1377 review of facility records or manifests and, if necessary, by chemical analysis.  
 1378  
 1379 c) Concurrently, the emergency coordinator must assess possible hazards to human  
 1380 health or the environment that may result from the release, fire, or explosion.  
 1381 This assessment must consider both direct and indirect effects of the release, fire,  
 1382 or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are  
 1383 generated, or the effects of any hazardous surface water run-off from water or  
 1384 chemical agents used to control fire and heat-induced explosions).  
 1385  
 1386 d) If the emergency coordinator determines that the facility has had a release, fire, or  
 1387 explosion that could threaten human health or the environment outside the  
 1388 facility, the emergency coordinator must report the findings as follows:  
 1389  
 1390 1) If the assessment indicates that evacuation of local areas may be advisable,  
 1391 the emergency coordinator must immediately notify appropriate local  
 1392 authorities. The emergency coordinator must be available to help  
 1393 appropriate officials decide whether local areas should be evacuated; and  
 1394  
 1395 2) The emergency coordinator must immediately notify either the  
 1396 government official designated as the on-scene coordinator for that  
 1397 geographical area or the National Response Center (using their 24-hour  
 1398 toll free number 800-424-8802). The report must include the following:  
 1399  
 1400 A) The name and telephone number of the reporter;  
 1401  
 1402 B) The name and address of the facility;  
 1403  
 1404 C) The time and type of incident (e.g., release, fire);  
 1405  
 1406 D) The name and quantity of materials involved, to the extent known;  
 1407  
 1408 E) The extent of injuries, if any; and  
 1409  
 1410 F) The possible hazards to human health or the environment outside  
 1411 the facility.  
 1412  
 1413 e) During an emergency, the emergency coordinator must take all reasonable  
 1414 measures necessary to ensure that fires, explosions, and releases do not occur,  
 1415 recur, or spread to other hazardous waste at the facility. These measures must  
 1416 include, where applicable, stopping processes and operations, collecting and  
 1417 containing release waste, and removing or isolating containers.  
 1418  
 1419 f) If the facility stops operations in response to a fire, explosion, or release, the

1420 emergency coordinator must monitor for leaks, pressure buildup, gas generation,  
1421 or ruptures in valves, pipes, or other equipment, wherever this is appropriate.  
1422

1423 g) Immediately after an emergency, the emergency coordinator must provide for  
1424 treating, storing, or disposing of recovered waste, contaminated soil or surface  
1425 water, or any other material that results from a release, fire, or explosion at the  
1426 facility.  
1427

1428 BOARD NOTE: Unless the owner or operator can demonstrate, in accordance  
1429 with 35 Ill. Adm. Code 721.103(d) or (e), that the recovered material is not a  
1430 hazardous waste, the owner or operator becomes a generator of hazardous waste  
1431 and must manage it in accordance with all applicable requirements of 35 Ill. Adm.  
1432 Code 722, 723, and 724.  
1433

1434 h) The emergency coordinator must ensure that the following is true in the affected  
1435 areas of the facility:  
1436

1437 1) No waste that may be incompatible with the released material is treated,  
1438 stored, or disposed of until cleanup procedures are completed; and  
1439

1440 2) All emergency equipment listed in the contingency plan is cleaned and fit  
1441 for its intended use before operations are resumed.  
1442

1443 i) ~~The owner or operator must notify the Agency and appropriate state and local~~  
1444 ~~authorities that the facility is in compliance with subsection (h) of this Section~~  
1445 ~~before operations are resumed in the affected areas of the facility.~~  
1446

1447 ij) The owner or operator must note in the operating record the time, date, and details  
1448 of any incident that requires implementing the contingency plan. Within 15 days  
1449 after the incident, the owner or operator must submit a written report on the  
1450 incident to the Agency. The report must include the following:  
1451

1452 1) The name, address, and telephone number of the owner or operator;  
1453

1454 2) The name, address, and telephone number of the facility;  
1455

1456 3) The date, time, and type of incident (e.g., fire, explosion);  
1457

1458 4) The name and quantity of materials involved;  
1459

1460 5) The extent of injuries, if any;  
1461

1462 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: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING AND REPORTING

**Section 724.171 Use of Manifest System**

- a) Receipt of Manifested Hazardous Waste.
  - 1) 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), 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.
  - 2) If a facility receives a hazardous waste shipment accompanied by a manifest, the owner, operator, or its agent must do the following:
    - A) The owner, operator, or agent must sign and date, by hand, each copy of the manifest;
    - B) The owner, operator, or agent must note any discrepancies (as defined in Section 724.172) on each copy of the manifest;
    - C) The owner, operator, or agent must immediately give the transporter at least one copy of the manifest;
    - D) The owner, operator, or agent must send a copy (Page 3) of the manifest to the generator within 30 days after delivery;
    - E) Within 30 days after delivery, the owner, operator, or agent must send the top copy (Page 1) of the manifest to the e-Manifest System for purposes of data entry and processing. In lieu of mailing this paper copy to the e-Manifest System operator, the owner or operator may transmit to the e-Manifest System operator an image file of Page 1 of the manifest, or both a data string file and the image file corresponding to Page 1 of the manifest. Any data or image files transmitted to USEPA under this subsection (a)

1506 must be submitted in data file and image file formats that are  
1507 acceptable to USEPA and that are supported by USEPA's  
1508 electronic reporting requirements and by the e-Manifest System;  
1509 and

1510  
1511 F) The owner, operator, or agent must retain at the facility a copy of  
1512 each manifest for at least three years after the date of delivery.  
1513

1514 3) The owner or operator of a facility receiving hazardous waste  
1515 subject to Subpart H of 35 Ill. Adm. Code 722, imported from a foreign  
1516 source must do the following; the receiving facility must mail a copy of  
1517 the manifest and documentation confirming USEPA's consent to the  
1518 import of hazardous waste to the following address within 30 days after  
1519 delivery: Office of Enforcement and Compliance Assurance, Office of  
1520 Federal Activities, International Compliance Assurance Division (2254A),  
1521 U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW,  
1522 Washington, DC 20460.

1523  
1524 A) List the relevant consent number from consent documentation  
1525 supplied by USEPA to the facility for each waste listed on the  
1526 manifest, matched to the relevant list number for the waste from  
1527 block 9b. If additional space is needed, the owner or operator  
1528 should use Continuation Sheets (USEPA Form 8700-22A); and

1529  
1530 B) Send a copy of the manifest within 30 days of delivery to USEPA  
1531 using the addresses listed in 35 Ill. Adm. Code 722.182(e) until the  
1532 facility can submit such a copy to the e-Manifest system per  
1533 subsection (a)(2)(E).

1534  
1535 b) If a facility receives, from a rail or water (bulk shipment) transporter, hazardous  
1536 waste that is accompanied by a shipping paper containing all the information  
1537 required on the manifest (excluding the USEPA identification numbers,  
1538 generator's certification, and signatures), the owner or operator, or the owner or  
1539 operator's agent, must do the following:

1540  
1541 1) It must sign and date each copy of the manifest or shipping paper (if the  
1542 manifest has not been received) to certify that the hazardous waste  
1543 covered by the manifest or shipping paper was received;

1544  
1545 2) It must note any significant discrepancies (as defined in Section  
1546 724.172(a)) in the manifest or shipping paper (if the manifest has not been  
1547 received) on each copy of the manifest or shipping paper;  
1548

1549 BOARD NOTE: The Board does not intend that the owner or operator of  
1550 a facility whose procedures under Section 724.113(c) include waste  
1551 analysis must perform that analysis before signing the shipping paper and  
1552 giving it to the transporter. Section 724.172(b), however, requires  
1553 reporting an unreconciled discrepancy discovered during later analysis.  
1554

1555 3) It must immediately give the rail or water (bulk shipment) transporter at  
1556 least one copy of the manifest or shipping paper (if the manifest has not  
1557 been received);  
1558

1559 4) The owner or operator must send a copy of the signed and dated manifest  
1560 or a signed and dated copy of the shipping paper (if the manifest has not  
1561 been received within 30 days after delivery) to the generator within 30  
1562 days after the delivery; and  
1563

1564 BOARD NOTE: Section 722.123(c) requires the generator to send three  
1565 copies of the manifest to the facility when hazardous waste is sent by rail  
1566 or water (bulk shipment).  
1567

1568 5) Retain at the facility a copy of the manifest and shipping paper (if signed  
1569 in lieu of the manifest at the time of delivery) for at least three years from  
1570 the date of delivery.  
1571

1572 c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or  
1573 operator of that facility must comply with the requirements of 35 Ill. Adm. Code  
1574 722. The provisions of 35 Ill. Adm. Code 722.115, 722.116, and 722.117 are  
1575 applicable to the on-site accumulation of hazardous wastes by generators.  
1576 Therefore, the provisions of 35 Ill. Adm. Code 722.115, 722.116, and 722.117  
1577 only apply to owners or operators that are shipping hazardous waste that they  
1578 generated at that facility or operating as a large quantity generator consolidating  
1579 hazardous waste from very small quantity generators under 35 Ill. Adm. Code  
1580 722.117(f).  
1581

1582 BOARD NOTE: ~~The provisions of 35 Ill. Adm. Code 722.134 are applicable to~~  
1583 ~~the on-site accumulation of hazardous wastes by generators. Therefore, the~~  
1584 ~~provisions of Section 722.134 only apply to owners or operators that are shipping~~  
1585 ~~hazardous waste that they generated at that facility.~~  
1586

1587 d) As required by 35 Ill. Adm. Code 722.184(d)(2)(O), within~~Within~~ three working  
1588 days after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code  
1589 722, the owner or operator of a facility must provide a copy of the movement  
1590 document bearing all required signatures to the foreign exporter and; ~~to the Office~~  
1591 ~~of Enforcement and Compliance Assurance, Office of Federal Activities,~~

1592 International Compliance Assurance Division (2254A), Environmental Protection  
 1593 Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460; to the Bureau of  
 1594 Land, Division of Land Pollution Control, Illinois Environmental Protection  
 1595 Agency, P.O. Box 19276, Springfield, IL 62794-9276; and to competent  
 1596 authorities of the all other concerned countries of export and transit that control the  
 1597 shipment as an export or transit of hazardous waste. On or after the electronic  
 1598 import-export reporting compliance date, to USEPA electronically using  
 1599 USEPA's WIETS. The original copy of the movement document must be  
 1600 maintained at the facility for at least three years from the date of signature. The  
 1601 owner or operator of a facility may satisfy this recordkeeping requirement by  
 1602 retaining electronically submitted documents in the facility's account on USEPA's  
 1603 WIETS, provided that copies are readily available for viewing and production if  
 1604 requested by any USEPA or authorized state inspector. No owner or operator of a  
 1605 facility may be held liable for the inability to produce the documents for  
 1606 inspection under this section if the owner or operator of a facility can demonstrate  
 1607 that the inability to produce the document is due exclusively to technical difficulty  
 1608 with USEPA's WIETS, for which the owner or operator of a facility bears no  
 1609 responsibility.

- 1610
- 1611 e) A facility must determine whether the consignment state for a shipment regulates  
 1612 any additional wastes (beyond those regulated federally) as hazardous wastes  
 1613 under its state hazardous waste program. A facility must also determine whether  
 1614 the consignment state or generator state requires the facility to submit any copies  
 1615 of the manifest to that state.
- 1616
- 1617 f) Legal Equivalence to Paper Manifests. E-Manifests that are obtained, completed,  
 1618 transmitted in accordance with 35 Ill. Adm. Code 722.120(a)(3), and used in  
 1619 accordance with this Section in lieu of the paper manifest form are the legal  
 1620 equivalent of paper manifest forms bearing handwritten signatures, and satisfy for  
 1621 all purposes any requirement in 35 Ill. Adm. Code 720 through 728 to obtain,  
 1622 complete, sign, provide, use, or retain a manifest.
- 1623
- 1624 1) Any requirement in 35 Ill. Adm. Code 720 through 728 for the owner or  
 1625 operator of a facility to sign a manifest or manifest certification by hand,  
 1626 or to obtain a handwritten signature, is satisfied by signing with or  
 1627 obtaining a valid and enforceable electronic signature within the meaning  
 1628 of 35 Ill. Adm. Code 722.125.
- 1629
- 1630 2) Any requirement in 35 Ill. Adm. Code 720 through 728 to give, provide,  
 1631 send, forward, or to return to another person a copy of the manifest is  
 1632 satisfied when a copy of an e-Manifest is transmitted to the other person.
- 1633

- 1634  
1635  
1636  
1637  
1638  
1639  
1640  
1641  
1642  
1643  
1644  
1645  
1646  
1647  
1648  
1649  
1650  
1651  
1652  
1653  
1654  
1655  
1656  
1657  
1658  
1659  
1660  
1661  
1662  
1663  
1664  
1665  
1666  
1667  
1668  
1669  
1670  
1671  
1672  
1673  
1674  
1675  
1676
- 3) Any requirement in 35 Ill. Adm. Code 720 through 728 for a manifest to accompany a hazardous waste shipment is satisfied when a copy of an e-Manifest is accessible during transportation and forwarded to the person or persons who are scheduled to receive delivery of the hazardous waste shipment.
  - 4) Any requirement in 35 Ill. Adm. Code 720 through 728 for an owner or operator to keep or retain a copy of each manifest is satisfied by the retention of the facility's e-Manifest copies in its account on the e-Manifest System, provided that such copies are readily available for viewing and production if requested by any USEPA or Agency inspector.
  - 5) No owner or operator may be held liable for the inability to produce an e-Manifest for inspection under this Section if the owner or operator can demonstrate that the inability to produce the e-Manifest is due exclusively to a technical difficulty with the e-Manifest System for which the owner or operator bears no responsibility.
- g) An owner or operator may participate in the e-Manifest System either by accessing the e-Manifest System from the owner's or operator's electronic equipment, or by accessing the e-Manifest System from portable equipment brought to the owner's or operator's site by the transporter that delivers the waste shipment to the facility.
- h) Special Procedures Applicable to Replacement Manifests. If a facility receives hazardous waste that is accompanied by a paper replacement manifest for a manifest that was originated electronically, the following procedures apply to the delivery of the hazardous waste by the final transporter:
- 1) Upon delivery of the hazardous waste to the designated facility, the owner or operator must sign and date each copy of the paper replacement manifest by hand in Item 20 (Designated Facility Certification of Receipt) and note any discrepancies in Item 18 (Discrepancy Indication Space) of the paper replacement manifest;
  - 2) The owner or operator of the facility must give back to the final transporter one copy of the paper replacement manifest;
  - 3) Within 30 days after delivery of the hazardous waste to the designated facility, the owner or operator of the facility must send one signed and dated copy of the paper replacement manifest to the generator and send an additional signed and dated copy of the paper replacement manifest to the e-Manifest System; and

1677  
1678  
1679  
1680  
1681  
1682  
1683  
1684  
1685  
1686  
1687  
1688  
1689  
1690  
1691  
1692  
1693  
1694  
1695  
1696  
1697  
1698  
1699  
1700  
1701  
1702  
1703  
1704  
1705  
1706  
1707  
1708  
1709  
1710  
1711  
1712  
1713  
1714  
1715  
1716  
1717  
1718  
1719

- 4) The owner or operator of the facility must retain at the facility one copy of the paper replacement manifest for at least three years after the date of delivery.
- i) Special procedures applicable to electronic signature methods undergoing tests. If an owner or operator using an e-Manifest signs this manifest electronically using an electronic signature method that is undergoing pilot or demonstration tests aimed at demonstrating the practicality or legal dependability of the signature method, the owner or operator must also sign with an ink signature the facility's certification of receipt or discrepancies on the printed copy of the manifest provided by the transporter. Upon executing its ink signature on this printed copy, the owner or operator must retain this original copy among its records for at least three years after the date of delivery of the waste.
- j) Imposition of User Fee for e-Manifest Use. An owner or operator that is a user of the e-Manifest System may be assessed a user fee by USEPA for the origination or processing of each e-Manifest. An owner or operator may also be assessed a user fee by USEPA for the collection and processing of paper manifest copies that owners or operators must submit to the e-Manifest System operator under subsection (a)(2)(E). USEPA has stated that it would maintain and update from time-to-time the current schedule of e-Manifest System user fees, which will be determined based on current and projected e-Manifest System costs and level of use of the e-Manifest System. USEPA has said that it would publish the current schedule of e-Manifest user fees as an appendix to 40 CFR 262.
- k) E-Manifest Signatures. E-Manifest signatures must meet the criteria described in 35 Ill. Adm. Code 722.125.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.172 Manifest Discrepancies**

- a) "Manifest discrepancies" are defined as any one of the following:
  - 1) Significant differences (as defined by subsection (b) 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;
  - 2) Rejected wastes, which may be a full or partial shipment of hazardous waste that the treatment, storage, or disposal facility cannot accept; or

- 1720 3) Container residues, which are residues that exceed the quantity limits for  
 1721 empty containers set forth in 35 Ill. Adm. Code 721.107(b).  
 1722
- 1723 b) "Significant differences in quantity" are defined as the appropriate of the  
 1724 following: for bulk waste, variations greater than 10 percent in weight; or, for  
 1725 batch waste, any variation in piece count, such as a discrepancy of one drum in a  
 1726 truckload. "Significant differences in type" are defined as obvious differences  
 1727 that can be discovered by inspection or waste analysis, such as waste solvent  
 1728 substituted for waste acid, or as toxic constituents not reported on the manifest or  
 1729 shipping paper.  
 1730
- 1731 c) Upon discovering a significant difference in quantity or type, the owner or  
 1732 operator must attempt to reconcile the discrepancy with the waste generator or  
 1733 transporter (e.g., with telephone conversations). If the discrepancy is not resolved  
 1734 within 15 days after receiving the waste, the owner or operator must immediately  
 1735 submit to the Agency a letter describing the discrepancy and attempts to reconcile  
 1736 it, and a copy of the manifest or shipping paper at issue.  
 1737
- 1738 d) Rejection of hazardous waste.  
 1739
- 1740 1) Upon rejecting waste or identifying a container residue that exceeds the  
 1741 quantity limits for empty containers set forth in 35 Ill. Adm. Code  
 1742 721.107(b), the facility owner or operator must consult with the generator  
 1743 prior to forwarding the waste to another facility that can manage the  
 1744 waste. If it is impossible to locate an alternative facility that can receive  
 1745 the waste, the facility owner or operator may return the rejected waste or  
 1746 residue to the generator. The facility owner or operator must send the  
 1747 waste to the alternative facility or to the generator within 60 days after the  
 1748 rejection or the container residue identification.  
 1749
- 1750 2) While the facility owner or operator is making arrangements for  
 1751 forwarding rejected wastes or residues to another facility under this  
 1752 Section, it must ensure that either the delivering transporter retains  
 1753 custody of the waste, or the facility owner or operator must provide for  
 1754 secure, temporary custody of the waste, pending delivery of the waste to  
 1755 the first transporter designated on the manifest prepared under subsection  
 1756 (e) or (f) of this Section.  
 1757
- 1758 e) Except as provided in subsection (e)(7) of this Section, for full or partial load  
 1759 rejections and residues that are to be sent off-site to an alternate facility, the  
 1760 facility owner or operator is required to prepare a new manifest in accordance  
 1761 with 35 Ill. Adm. Code 722.120(a) and the instructions set forth in subsections  
 1762 (e)(1) through (e)(6) of this Section:

- 1763  
1764  
1765  
1766  
1767  
1768  
1769  
1770  
1771  
1772  
1773  
1774  
1775  
1776  
1777  
1778  
1779  
1780  
1781  
1782  
1783  
1784  
1785  
1786  
1787  
1788  
1789  
1790  
1791  
1792  
1793  
1794  
1795  
1796  
1797  
1798  
1799  
1800  
1801  
1802  
1803  
1804  
1805
- 1) The facility owner or operator must write the generator's USEPA identification number in Item 1 of the new manifest. The facility owner or operator must 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 the facility owner or operator must write the generator's site address in the designated space in Item 5.
  - 2) The facility owner or operator must 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.
  - 3) The facility owner or operator must 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.
  - 4) The facility owner or operator must 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).
  - 5) The facility owner or operator must 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.
  - 6) The facility owner or operator must sign the Generator's/Offerrer'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, and mail a signed copy of the manifest to the generator identified in Item 5 of the new manifest.
  - 7) For full load rejections that are made while the transporter remains present at the facility, the facility owner or operator 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 owner or operator 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 owner or operator must use a new manifest and comply with subsections (e)(1) through (e)(6) of this Section.
- f) Except as provided in subsection (f)(7) of this Section, for rejected wastes and residues that must be sent back to the generator, the facility owner or operator is

1806 required to prepare a new manifest in accordance with 35 Ill. Adm. Code  
 1807 722.120(a) and the instructions set forth in subsections (f)(1) through (f)(6) and  
 1808 (f)(8) ~~of this Section~~;  
 1809

- 1810 1) The facility owner or operator must write the facility's USEPA  
 1811 identification number in Item 1 of the new manifest. The facility owner or  
 1812 operator must write the facility's name and mailing address in Item 5 of  
 1813 the new manifest. If the mailing address is different from the facility's site  
 1814 address, then the facility owner or operator must write the facility's site  
 1815 address in the designated space for Item 5 of the new manifest.  
 1816
- 1817 2) The facility owner or operator must write the name of the initial generator  
 1818 and the generator's USEPA identification number in the designated facility  
 1819 block (Item 8) of the new manifest.  
 1820
- 1821 3) The facility owner or operator must copy the manifest tracking number  
 1822 found in Item 4 of the old manifest to the Special Handling and Additional  
 1823 Information Block of the new manifest, and indicate that the shipment is a  
 1824 residue or rejected waste from the previous shipment.  
 1825
- 1826 4) The facility owner or operator must copy the manifest tracking number  
 1827 found in Item 4 of the new manifest to the manifest reference number line  
 1828 in the Discrepancy Block of the old manifest (Item 18a).  
 1829
- 1830 5) The facility owner or operator must write the USDOT description for the  
 1831 rejected load or the residue in Item 9 (USDOT Description) of the new  
 1832 manifest and write the container types, quantity, and volumes of waste.  
 1833
- 1834 6) The facility owner or operator must sign the Generator's/Offeror's  
 1835 Certification to certify, as offeror of the shipment, that the waste has been  
 1836 properly packaged, marked and labeled and is in proper condition for  
 1837 transportation.  
 1838
- 1839 7) For full load rejections that are made while the transporter remains at the  
 1840 facility, the facility owner or operator may return the shipment to the  
 1841 generator with the original manifest by completing Item 18b of the  
 1842 manifest and supplying the generator's information in the Alternate  
 1843 Facility space. The facility owner or operator must retain a copy for its  
 1844 records and then give the remaining copies of the manifest to the  
 1845 transporter to accompany the shipment. If the original manifest is not  
 1846 used, then the facility owner or operator must use a new manifest and  
 1847 comply with subsections (f)(1) through (f)(6) and (f)(8) ~~of this Section~~.  
 1848

1849 8) For full or partial load rejections and container residues contained in non-  
1850 empty containers that are returned to the generator, the facility owner or  
1851 operator must also comply with the exception reporting requirements in 35  
1852 Ill. Adm. Code 722.142(a).  
1853

1854 g) If a facility owner or operator rejects a waste or identifies a container residue that  
1855 exceeds the quantity limits for empty containers set forth in 35 Ill. Adm. Code  
1856 721.107(b) after it has signed, dated, and returned a copy of the manifest to the  
1857 delivering transporter or to the generator, the facility owner or operator must  
1858 amend its copy of the manifest to indicate the rejected wastes or residues in the  
1859 discrepancy space of the amended manifest. The facility owner or operator must  
1860 also copy the manifest tracking number from Item 4 of the new manifest to the  
1861 Discrepancy space of the amended manifest, and must re-sign and date the  
1862 manifest to certify to the information as amended. The facility owner or operator  
1863 must retain the amended manifest for at least three years from the date of  
1864 amendment, and must, within 30 days, send a copy of the amended manifest to  
1865 the transporter and generator that received copies prior to their being amended.  
1866

1867 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
1868

1869 **Section 724.173 Operating Record**  
1870

1871 a) The owner or operator must keep a written operating record at the facility.  
1872

1873 b) The following information must be recorded as it becomes available and  
1874 maintained in the operating record for three years unless otherwise provided as  
1875 follows:  
1876

1877 1) A description and the quantity of each hazardous waste received and the  
1878 methods and dates of its treatment, storage, or disposal at the facility, as  
1879 required by Appendix A ~~of this Part~~. This information must be maintained  
1880 in the operating record until closure of the facility;  
1881

1882 2) The location of each hazardous waste within the facility and the quantity  
1883 at each location. For disposal facilities, the location and quantity of each  
1884 hazardous waste must be recorded on a map or diagram that shows each  
1885 cell or disposal area. For all facilities, this information must include cross-  
1886 references to manifest document numbers, if the waste was accompanied  
1887 by a manifest. This information must be maintained in the operating  
1888 record until closure of the facility;  
1889

1890 BOARD NOTE: See Section 724.219 for related requirements.  
1891

- 1892  
1893  
1894  
1895  
1896  
1897  
1898  
1899  
1900  
1901  
1902  
1903  
1904  
1905  
1906  
1907  
1908  
1909  
1910  
1911  
1912  
1913  
1914  
1915  
1916  
1917  
1918  
1919  
1920  
1921  
1922  
1923  
1924  
1925  
1926  
1927  
1928  
1929  
1930  
1931  
1932  
1933  
1934
- 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);
  - 6) 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, 724.702, 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 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 pursuant to 35 Ill. Adm. Code 728.107(a). This information must be maintained in the operating record until closure of the

- 1935 facility;
- 1936
- 1937 11) For an off-site treatment facility, a copy of the notice, and the certification
- 1938 and demonstration, if applicable, required of the generator or the owner or
- 1939 operator under 35 Ill. Adm. Code 728.107 or 728.108;
- 1940
- 1941 12) For an on-site treatment facility, the information contained in the notice
- 1942 (except the manifest number), and the certification and demonstration, if
- 1943 applicable, required of the generator or the owner or operator under 35 Ill.
- 1944 Adm. Code 728.107 or 728.108;
- 1945
- 1946 13) For an off-site land disposal facility, a copy of the notice, and the
- 1947 certification and demonstration, if applicable, required of the generator or
- 1948 the owner or operator of a treatment facility under 35 Ill. Adm. Code
- 1949 728.107 or 728.108, whichever is applicable;
- 1950
- 1951 14) For an on-site land disposal facility, the information contained in the
- 1952 notice required of the generator or owner or operator of a treatment facility
- 1953 under 35 Ill. Adm. Code 728.107, except for the manifest number, and the
- 1954 certification and demonstration, required under 35 Ill. Adm. Code
- 1955 728.108, whichever is applicable;
- 1956
- 1957 15) For an off-site storage facility, a copy of the notice, and the certification
- 1958 and demonstration if applicable, required of the generator or the owner or
- 1959 operator under 35 Ill. Adm. Code 728.107 or 728.108;
- 1960
- 1961 16) For an on-site storage facility, the information contained in the notice
- 1962 (except the manifest number), and the certification and demonstration if
- 1963 applicable, required of the generator or the owner or operator under 35 Ill.
- 1964 Adm. Code 728.107 or 728.108;
- 1965
- 1966 17) Any records required under Section 724.101(j)(13);
- 1967
- 1968 18) Monitoring, testing, or analytical data where required by Section 724.447
- 1969 must be maintained in the operating record for five years; and
- 1970
- 1971 19) Certifications, as required by Section 724.296(f), must be maintained in
- 1972 the operating record until closure of the facility.
- 1973

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

1974 **Section 724.175 Annual Facility Activities Report**

1975

1976

1977

1978 The owner or operator must ~~complete~~prepare and submit USEPA Form 8700-13 A/Ba single  
 1979 eopy of an annual facility activities report to the Agency by March 1 of each year and. The  
 1980 report form supplied by the Agency must be used for this report. The annual facility activities  
 1981 report must cover facility activities during the previous calendar year, and must include the  
 1982 following information:

- 1983
- 1984 a) ~~The USEPA identification number, name, and address of the facility;~~
- 1985
- 1986 b) ~~The calendar year covered by the report;~~
- 1987
- 1988 e) ~~For off-site facilities, the USEPA identification number of each hazardous waste~~  
 1989 ~~generator from which the facility received a hazardous waste during the year; for~~  
 1990 ~~imported shipments, the report must give the name and address of the foreign~~  
 1991 ~~generator;~~
- 1992
- 1993 d) ~~A description and the quantity of each hazardous waste the facility received~~  
 1994 ~~during the year. For off-site facilities, this information must be listed by USEPA~~  
 1995 ~~identification number of each generator;~~
- 1996
- 1997 e) ~~The method of treatment, storage, or disposal for each hazardous waste;~~
- 1998
- 1999 f) ~~This subsection (f) corresponds with 40 CFR 264.75(f), which USEPA has~~  
 2000 ~~designated as "reserved." This statement maintains structural consistency with~~  
 2001 ~~the USEPA rules;~~
- 2002
- 2003 g) ~~The most recent closure cost estimate under Section 724.242, and, for disposal~~  
 2004 ~~facilities, the most recent post-closure cost estimate under Section 724.244;~~
- 2005
- 2006 h) ~~For generators that treat, store or dispose of hazardous waste on-site, a description~~  
 2007 ~~of the efforts undertaken during the year to reduce the volume and toxicity of the~~  
 2008 ~~waste generated;~~
- 2009
- 2010 i) ~~For generators that treat, store or dispose of hazardous waste on-site, a description~~  
 2011 ~~of the changes in volume and toxicity of waste actually achieved during the year~~  
 2012 ~~in comparison to previous years, to the extent such information is available for~~  
 2013 ~~years prior to 1984; and~~
- 2014
- 2015 j) ~~The certification signed by the owner or operator of the facility or the owner or~~  
 2016 ~~operator's authorized representative.~~
- 2017

2018 BOARD NOTE: Corresponding 40 CFR 264.75 requires biennial reporting. The Board has  
 2019 required annual reporting, since Section 20.1 of the Act [415 ILCS 5/20.1 (2006)] requires the  
 2020 Agency to assemble annual reports, and only annual facility activities reports will enable the

Agency to fulfill this mandate.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.176 Unmanifested Waste Report**

a) 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, USEPA has suggested that the owner or operator file an unmanifested waste report for the hazardous waste movement.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART F: RELEASES FROM SOLID WASTE MANAGEMENT UNITS

**Section 724.190 Applicability**

- a) Types of units.
  - 1) Except as provided in subsection (b) ~~of this Section~~, the regulations in this Subpart F apply to owners and operators of facilities that treat, store or dispose of hazardous waste. The owner or operator must satisfy the requirements identified in subsection (a)(2) ~~of this Section~~ for all wastes (or constituents thereof) contained in solid waste management units at the facility regardless of the time at which waste was placed in such units.
  - 2) All solid waste management units must comply with the requirements in Section 724.201. A surface impoundment, waste pile, land treatment unit, or landfill that receives hazardous waste after July 26, 1982 (referred to in this Subpart F as a "regulated unit") must comply with Sections 724.191 through 724.200, in lieu of Section 724.201, for purposes of detecting, characterizing, and responding to releases to the uppermost aquifer. The financial responsibility requirements of Section 724.201 apply to regulated units.
- b) The owner or operator's regulated unit or units are not subject to regulation for releases into the uppermost aquifer under this Subpart F if the following is true:
  - 1) The owner or operator is exempted pursuant to Section 724.101; or
  - 2) The owner or operator operates a unit that the Agency finds:
    - A) Is an engineered structure.
    - B) Does not receive or contain liquid waste or waste containing free liquids.
    - C) Is designed and operated to exclude liquid, precipitation, and other runoff and runoff.
    - D) Has both inner and outer layers of containment enclosing the waste.
    - E) Has a leak detection system built into each containment layer.

- 2107  
2108  
2109  
2110  
2111  
2112  
2113  
2114  
2115  
2116  
2117  
2118  
2119  
2120  
2121  
2122  
2123  
2124  
2125  
2126  
2127  
2128  
2129  
2130  
2131  
2132  
2133  
2134  
2135  
2136  
2137  
2138  
2139  
2140  
2141  
2142  
2143  
2144  
2145  
2146  
2147  
2148  
2149
- F) The owner or operator will provide continuing operation and maintenance of these leak detection systems during the active life of the unit and the closure and post-closure care periods.
  - G) To a reasonable degree of certainty, will not allow hazardous constituents to migrate beyond the outer containment layer prior to the end of the post-closure care period; or
- 3) The Agency finds, pursuant to Section 724.380(d), that the treatment zone of a land treatment unit that qualifies as a regulated unit does not contain levels of hazardous constituents that are above background levels of those constituents by an amount that is statistically significant, and if an unsaturated zone monitoring program meeting the requirements of Section 724.378 has not shown a statistically significant increase in hazardous constituents below the treatment zone during the operating life of the unit. An exemption pursuant to this subsection (b) can only relieve an owner or operator of responsibility to meet the requirements of this Subpart F during the post-closure care period; or
- 4) The Agency finds that there is no potential for migration of liquid from a regulated unit to the uppermost aquifer during the active life of the regulated unit (including the closure period) and the post-closure care period specified pursuant to Section 724.217. This demonstration must be certified by a qualified geologist or geotechnical engineer. In order to provide an adequate margin of safety in the prediction of potential migration of liquid, the owner or operator must base any predictions made pursuant to this subsection (b) on assumptions that maximize the rate of liquid migration; or
- 5) The owner or operator designs and operates a pile in compliance with Section 724.350(c).
- c) The regulations under this Subpart F apply during the active life of the regulated unit (including the closure period). After closure of the regulated unit, the following is true of the applicability of the regulations in this Subpart F:
- 1) Do not apply if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure;
  - 2) Apply during the post-closure care period pursuant to Section 724.217 if the owner or operator is conducting a detection monitoring program pursuant to Section 724.198; or

- 2150  
2151 3) Apply during the compliance period pursuant to Section 724.196 if the  
2152 owner or operator is conducting a compliance monitoring program  
2153 pursuant to Section 724.199 or a corrective action program pursuant to  
2154 Section 724.200.  
2155  
2156 d) This Subpart F applies to miscellaneous units if necessary to comply with  
2157 Sections 724.701 through 724.703.  
2158  
2159 e) The regulations of this Subpart F apply to all owners and operators subject to 35  
2160 Ill. Adm. Code 703.161, when the Agency issues a post-closure care permit or  
2161 other enforceable document that contains alternative requirements for the facility,  
2162 as provided in 35 Ill. Adm. Code 703.161. When alternative requirements apply to  
2163 a facility, a reference in this Subpart F to "in the permit" must mean "in the  
2164 enforceable document-".  
2165  
2166 f) A permit or enforceable document can contain alternative requirements for  
2167 groundwater monitoring and corrective action for releases to groundwater  
2168 applicable to a regulated unit that replace all or part of the requirements of 35 Ill.  
2169 Adm. Code 724.191 through 724.200, as provided pursuant to 35 Ill. Adm. Code  
2170 703.161, where the Board or Agency determines the following:  
2171  
2172 1) The regulated unit is situated among solid waste management units (or  
2173 areas of concern), a release has occurred, and both the regulated unit and  
2174 one or more solid waste management units (or areas of concern) are likely  
2175 to have contributed to the release; and  
2176  
2177 2) It is not necessary to apply the groundwater monitoring and corrective  
2178 action requirements of 35 Ill. Adm. Code 724.191 through 724.200  
2179 because alternative requirements will adequately protect human health and  
2180 the environment.

2181  
2182 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
2183

2184 **Section 724.191 Required Programs**  
2185

- 2186 a) Owners and operators subject to this Subpart F must conduct a monitoring and  
2187 response program as follows:  
2188  
2189 1) Whenever hazardous constituents pursuant to Section 724.193 from a  
2190 regulated unit are detected at a compliance point pursuant to Section  
2191 724.195, the owner or operator must institute a compliance monitoring  
2192 program pursuant to Section 724.199. "Detected" is defined as

- 2193 statistically significant evidence of contamination, as described in Section  
2194 724.198(f).  
2195  
2196 2) Whenever the groundwater protection standard pursuant to Section  
2197 724.192 is exceeded, the owner or operator must institute a corrective  
2198 action program pursuant to Section 724.200. "Exceeded" is defined as  
2199 statistically significant evidence of increased contamination, as described  
2200 in Section 724.199(d).  
2201  
2202 3) Whenever hazardous constituents pursuant to Section 724.193 from a  
2203 regulated unit exceed concentration limits pursuant to Section 724.194 in  
2204 groundwater between the compliance point pursuant to Section 724.195  
2205 and the downgradient facility property boundary, the owner or operator  
2206 must institute a corrective action program pursuant to Section 724.200; or  
2207  
2208 4) In all other cases, the owner or operator must institute a detection  
2209 monitoring program pursuant to Section 724.198.  
2210  
2211 b) The Agency must specify in the facility permit the specific elements of the  
2212 monitoring and response program. The Agency may include one or more of the  
2213 programs identified in subsection (a) ~~of this Section~~ in the facility permit as may  
2214 be necessary to adequately protect human health and the environment and must  
2215 specify the circumstances under which each of the programs will be required. In  
2216 deciding whether to require the owner or operator to be prepared to institute a  
2217 particular program, the Agency must consider the potential adverse effects on  
2218 human health and the environment that might occur before final administrative  
2219 action on a permit modification application to incorporate such a program could  
2220 be taken.

2221  
2222 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
2223

2224 **Section 724.193 Hazardous Constituents**  
2225

- 2226 a) The Agency must specify in the facility permit the hazardous constituents to  
2227 which the groundwater protection standard of Section 724.192 applies.  
2228 Hazardous constituents are constituents identified in Appendix H of 35 Ill. Adm.  
2229 Code 721 that have been detected in groundwater in the uppermost aquifer  
2230 underlying a regulated unit and that are reasonably expected to be in or derived  
2231 from waste contained in a regulated unit, unless the Agency has excluded them  
2232 under subsection (b) ~~of this Section~~.  
2233  
2234 b) The Agency must exclude a constituent in Appendix H of 35 Ill. Adm. Code 721  
2235 from the list of hazardous constituents specified in the facility permit if it finds

2236 that the constituent is not capable of posing a substantial present or potential  
2237 hazard to human health or the environment. In deciding whether to grant an  
2238 exemption, the Agency must consider the following:  
2239

- 2240 1) Potential adverse effects on groundwater quality, considering the  
2241 following:  
2242
- 2243 A) The physical and chemical characteristics of the waste in the  
2244 regulated unit, including its potential for migration;
  - 2245
  - 2246 B) The hydrogeological characteristics of the facility and surrounding  
2247 land;
  - 2248
  - 2249 C) The quantity of groundwater and the direction of groundwater  
2250 flow;
  - 2251
  - 2252 D) The proximity and withdrawal rates of groundwater users;
  - 2253
  - 2254 E) The current and future uses of groundwater in the area;
  - 2255
  - 2256 F) The existing quality of groundwater, including other sources of  
2257 contamination, and their cumulative impact on the groundwater  
2258 quality;
  - 2259
  - 2260 G) The potential for health risks caused by human exposure to waste  
2261 constituents;
  - 2262
  - 2263 H) The potential damage to wildlife, crops, vegetation, and physical  
2264 structures caused by exposure to waste constituents;
  - 2265
  - 2266 I) The persistence and permanence of the potential adverse effects;  
2267 and
  - 2268
- 2269 2) Potential adverse effects on hydraulically-connected surface water quality,  
2270 considering the following:  
2271
- 2272 A) The volume and physical and chemical characteristics of the waste  
2273 in the regulated unit;
  - 2274
  - 2275 B) The hydrogeological characteristics of the facility and surrounding  
2276 land;
  - 2277
  - 2278 C) The quantity and quality of groundwater and the direction of

- 2279 groundwater flow;
- 2280
- 2281 D) The patterns of rainfall in the region;
- 2282
- 2283 E) The proximity of the regulated unit to surface waters;
- 2284
- 2285 F) The current and future uses of surface waters in the area and any
- 2286 water quality standards established for those surface waters;
- 2287
- 2288 G) The existing quality of surface water, including other sources of
- 2289 contamination, and the cumulative impact on surface water quality;
- 2290
- 2291 H) The potential for health risks caused by human exposure to waste
- 2292 constituents;
- 2293
- 2294 I) The potential damage to wildlife, crops, vegetation, and physical
- 2295 structures caused by exposure to waste constituents; and
- 2296
- 2297 J) The persistence and permanence of the potential adverse effects.
- 2298

2299 c) In making any determination under subsection (b) of ~~this Section~~ about the use of  
2300 groundwater in the area around the facility, the Agency must consider any  
2301 identification of underground sources of drinking water and exempted aquifers  
2302 made under 35 Ill. Adm. Code 704.123.

2303

2304 d) The Agency must make specific written findings in granting any exemptions  
2305 under subsection (b) ~~of this Section~~.

2306

2307 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

2308

2309 **Section 724.196 Compliance Period**

- 2310
- 2311 a) The Agency must specify in the facility permit the compliance period during  
2312 which the groundwater protection standard of Section 724.192 applies. The  
2313 compliance period is the number of years equal to the active life of the waste  
2314 management area (including any waste management activity prior to permitting,  
2315 and the closure period.)
  - 2316
  - 2317 b) The compliance period begins when the owner or operator initiates a compliance  
2318 monitoring program meeting the requirements of Section 724.199.
  - 2319
  - 2320 c) If the owner or operator is engaged in a corrective action program at the end of  
2321 the compliance period specified in subsection (a) ~~of this Section~~, the compliance

2322 period is extended until the owner or operator can demonstrate that the  
2323 groundwater protection standard of Section 724.192 has not been exceeded for a  
2324 period of three consecutive years.  
2325

2326 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
2327

2328 **Section 724.197 General Groundwater Monitoring Requirements**  
2329

2330 The owner or operator must comply with the following requirements for any groundwater  
2331 monitoring program developed to satisfy Section 724.198, 724.199, or 724.200.  
2332

2333 a) The groundwater monitoring system must consist of a sufficient number of wells,  
2334 installed at appropriate locations and depths to yield groundwater samples from  
2335 the uppermost aquifer that fulfill the following requirements:  
2336

2337 1) They represent the quality of background groundwater that has not been  
2338 affected by leakage from a regulated unit. A determination of background  
2339 groundwater quality may include sampling of wells that are not  
2340 hydraulically upgradient from the waste management area where the  
2341 following is true:  
2342

2343 A) Hydrogeologic conditions do not allow the owner or operator to  
2344 determine what wells are upgradient; or  
2345

2346 B) Sampling at other wells will provide an indication of background  
2347 groundwater quality that is as representative or more representative  
2348 than that provided by the upgradient wells;  
2349

2350 2) They represent the quality of groundwater passing the point of  
2351 compliance; and  
2352

2353 3) They allow for the detection of contamination when hazardous waste or  
2354 hazardous constituents have migrated from the hazardous waste  
2355 management area to the uppermost aquifer.  
2356

2357 b) If a facility contains more than one regulated unit, separate groundwater  
2358 monitoring systems are not required for each regulated unit provided that  
2359 provisions for sampling the groundwater in the uppermost aquifer will enable  
2360 detection and measurement at the compliance point of hazardous constituents  
2361 from the regulated units that have entered the groundwater in the uppermost  
2362 aquifer.  
2363

2364 c) All monitoring wells must be cased in a manner that maintains the integrity of the

2365 monitoring well bore hole. This casing must be screened or perforated and  
 2366 packed with gravel or sand, where necessary, to enable collection of groundwater  
 2367 samples. The annular space (i.e., the space between the bore hole and well  
 2368 casing) above the sampling depth must be sealed to prevent contamination of  
 2369 samples and the groundwater.  
 2370

2371 d) The groundwater monitoring program must include consistent sampling and  
 2372 analysis procedures that are designed to ensure monitoring results that provide a  
 2373 reliable indication of groundwater quality below the waste management area. At  
 2374 a minimum the program must include procedures and techniques for the  
 2375 following:

- 2376 1) Sample collection;
- 2377
- 2378 2) Sample preservation and shipment;
- 2379
- 2380 3) Analytical procedures; and
- 2381
- 2382 4) Chain of custody control.
- 2383
- 2384

2385 e) The groundwater monitoring program must include sampling and analytical  
 2386 methods that are appropriate for groundwater sampling and that accurately  
 2387 measure hazardous constituents in groundwater samples.  
 2388

2389 f) The groundwater monitoring program must include a determination of the  
 2390 groundwater surface elevation each time groundwater is sampled.  
 2391

2392 g) In detection monitoring or where appropriate in compliance monitoring, data on  
 2393 each hazardous constituent specified in the permit will be collected from  
 2394 background wells and wells at the compliance points. The number and kinds of  
 2395 samples collected to establish background must be appropriate for the form of  
 2396 statistical test employed, following generally accepted statistical principles. The  
 2397 sample size must be as large as necessary to ensure with reasonable confidence  
 2398 that a contaminant release to groundwater from a facility will be detected. The  
 2399 owner or operator will determine an appropriate sampling procedure and interval  
 2400 for each hazardous constituent listed in the facility permit that must be specified  
 2401 in the unit permit upon approval by the Agency. This sampling procedure must  
 2402 fulfill the following requirements:

- 2403 1) It may be a sequence of at least four samples, taken at an interval that  
 2404 assures, to the greatest extent technically feasible, that an independent  
 2405 sample is obtained, by reference to the uppermost aquifer's effective  
 2406 porosity, hydraulic conductivity and hydraulic gradient, and the fate and  
 2407

- 2408 transport characteristics of the potential contaminants; or  
 2409  
 2410 2) It may be an alternate sampling procedure proposed by the owner or  
 2411 operator and approved by the Agency.  
 2412  
 2413 h) The owner or operator must specify one of the following statistical methods to be  
 2414 used in evaluating groundwater monitoring data for each hazardous constituent  
 2415 that, upon approval by the Agency, will be specified in the unit permit. The  
 2416 statistical test chosen must be conducted separately for each hazardous constituent  
 2417 in each well. Where practical quantification limits (pqls) are used in any of the  
 2418 following statistical procedures to comply with subsection (i)(5) ~~of this Section~~,  
 2419 the pql must be proposed by the owner or operator and approved by the Agency.  
 2420 Use of any of the following statistical methods must adequately protect human  
 2421 health and the environment and must comply with the performance standards  
 2422 outlined in subsection (i) ~~of this Section~~.  
 2423  
 2424 1) A parametric analysis of variance (ANOVA) followed by multiple  
 2425 comparisons procedures to identify statistically significant evidence of  
 2426 contamination. The method must include estimation and testing of the  
 2427 contrasts between each compliance well's mean and the background mean  
 2428 levels for each constituent.  
 2429  
 2430 2) An analysis of variance (ANOVA) based on ranks followed by multiple  
 2431 comparisons procedures to identify statistically significant evidence of  
 2432 contamination. The method must include estimation and testing of the  
 2433 contrasts between each compliance well's median and the background  
 2434 median levels for each constituent.  
 2435  
 2436 3) A tolerance or prediction interval procedure in which an interval for each  
 2437 constituent is established from the distribution of the background data, and  
 2438 the level of each constituent in each compliance well is compared to the  
 2439 upper tolerance or prediction limit.  
 2440  
 2441 4) A control chart approach that gives control limits for each constituent.  
 2442  
 2443 5) Another statistical test method submitted by the owner or operator and  
 2444 approved by the Agency.  
 2445  
 2446 i) Any statistical method chosen pursuant to subsection (h) ~~of this Section~~ for  
 2447 specification in the unit permit must comply with the following performance  
 2448 standards, as appropriate:  
 2449  
 2450 1) The statistical method used to evaluate groundwater monitoring data must

- 2451 be appropriate for the distribution of chemical parameters or hazardous  
 2452 constituents. If the distribution of the chemical parameters or hazardous  
 2453 constituents is shown by the owner or operator to be inappropriate for a  
 2454 normal theory test, then the data should be transformed or a distribution-  
 2455 free theory test should be used. If the distributions for the constituents  
 2456 differ, more than one statistical method may be needed.  
 2457
- 2458 2) If an individual well comparison procedure is used to compare an  
 2459 individual compliance well constituent concentration with background  
 2460 constituent concentrations or a groundwater protection standard, the test  
 2461 must be done at a Type I error level no less than 0.01 for each testing  
 2462 period. If a multiple comparisons procedure is used, the Type I  
 2463 experimentwise error rate for each testing period must be no less than  
 2464 0.05; however, the Type I error of no less than 0.01 for individual well  
 2465 comparisons must be maintained. This performance standard does not  
 2466 apply to tolerance intervals, prediction intervals or control charts.  
 2467
- 2468 3) If a control chart approach is used to evaluate groundwater monitoring  
 2469 data, the specific type of control chart and its associated parameter value  
 2470 must be proposed by the owner or operator and approved by the Agency if  
 2471 the Agency finds it to adequately protect human health and the  
 2472 environment.  
 2473
- 2474 4) If a tolerance interval or a prediction interval is used to evaluate  
 2475 groundwater monitoring data, the levels of confidence and, for tolerance  
 2476 intervals, the percentage of the population that the interval must contain,  
 2477 must be proposed by the owner or operator and approved by the Agency if  
 2478 the Agency finds these parameters to adequately protect human health and  
 2479 the environment. These parameters will be determined after considering  
 2480 the number of samples in the background database, the data distribution,  
 2481 and the range of the concentration values for each constituent of concern.  
 2482
- 2483 5) The statistical method must account for data below the limit of detection  
 2484 with one or more statistical procedures that adequately protect human  
 2485 health and the environment. Any practical quantification limit (pql)  
 2486 approved by the Agency pursuant to subsection (h) of this Section that is  
 2487 used in the statistical method must be the lowest concentration level that  
 2488 can be reliably achieved within specified limits of precision and accuracy  
 2489 during routine laboratory operating conditions that are available to the  
 2490 facility.  
 2491
- 2492 6) If necessary, the statistical method must include procedures to control or  
 2493 correct for seasonal and spatial variability, as well as temporal correlation

2494 in the data.

2495  
2496 j) Groundwater monitoring data collected in accordance with subsection (g) of this  
2497 Section, including actual levels of constituents, must be maintained in the facility  
2498 operating record. The Agency must specify in the permit when the data must be  
2499 submitted for review.

2500  
2501 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
2502

2503 **Section 724.198 Detection Monitoring Program**

2504  
2505 An owner or operator required to establish a detection monitoring program under this Subpart F  
2506 must, at a minimum, discharge the following responsibilities:

2507  
2508 a) The owner or operator must monitor for indicator parameters (e.g., specific  
2509 conductance, total organic carbon, or total organic halogen), waste constituents or  
2510 reaction products that provide a reliable indication of the presence of hazardous  
2511 constituents in groundwater. The Agency must specify the parameters or  
2512 constituents to be monitored in the facility permit, after considering the following  
2513 factors:

- 2514  
2515 1) The types, quantities, and concentrations of constituents in wastes  
2516 managed at the regulated unit;  
2517  
2518 2) The mobility, stability, and persistence of waste constituents or their  
2519 reaction products in the unsaturated zone beneath the waste management  
2520 area;  
2521  
2522 3) The detectability of indicator parameters, waste constituents, and reaction  
2523 products in groundwater; and  
2524  
2525 4) The concentrations or values and coefficients of variation of proposed  
2526 monitoring parameters or constituents in the groundwater background.

2527  
2528 b) The owner or operator must install a groundwater monitoring system at the  
2529 compliance point as specified under Section 724.195. The groundwater  
2530 monitoring system must comply with Sections 724.197(a)(2), 724.197(b), and  
2531 724.197(c).

2532  
2533 c) The owner or operator must conduct a groundwater monitoring program for each  
2534 chemical parameter and hazardous constituent specified in the permit pursuant to  
2535 subsection (a) of this Section in accordance with Section 724.197(g). The owner  
2536 or operator must maintain a record of groundwater analytical data, as measured

- 2537 and in a form necessary for the determination of statistical significance under  
2538 Section 724.197(h).  
2539
- 2540 d) The Agency must specify the frequencies for collecting samples and conducting  
2541 statistical tests to determine whether there is statistically significant evidence of  
2542 contamination for any parameter or hazardous constituent specified in the permit  
2543 conditions under subsection (a) of this Section in accordance with Section  
2544 724.197(g).  
2545
- 2546 e) The owner or operator must determine the groundwater flow rate and direction in  
2547 the uppermost aquifer at least annually.  
2548
- 2549 f) The owner or operator must determine whether there is statistically significant  
2550 evidence of contamination for any chemical parameter or hazardous constituent  
2551 specified in the permit pursuant to subsection (a) of this Section at a frequency  
2552 specified under subsection (d) of this Section.  
2553
- 2554 1) In determining whether statistically significant evidence of contamination  
2555 exists, the owner or operator must use the methods specified in the permit  
2556 under Section 724.197(h). These methods must compare data collected at  
2557 the compliance points to the background groundwater quality data.  
2558
- 2559 2) The owner or operator must determine whether there is statistically  
2560 significant evidence of contamination at each monitoring well at the  
2561 compliance point within a reasonable period of time after completion of  
2562 sampling. The Agency must specify in the facility permit what period of  
2563 time is reasonable, after considering the complexity of the statistical test  
2564 and the availability of laboratory facilities to perform the analysis of  
2565 groundwater samples.  
2566
- 2567 g) If the owner or operator determines pursuant to subsection (f) of this Section that  
2568 there is statistically significant evidence of contamination for chemical parameters  
2569 or hazardous constituents specified pursuant to subsection (a) of this Section at  
2570 any monitoring well at the compliance point, the owner or operator must do the  
2571 following:  
2572
- 2573 1) Notify the Agency of this finding in writing within seven days. The  
2574 notification must indicate what chemical parameters or hazardous  
2575 constituents have shown statistically significant evidence of  
2576 contamination.  
2577
- 2578 2) Immediately sample the groundwater in all monitoring wells and  
2579 determine whether constituents in the list of Appendix I of this Part are

2580 present, and if so, in what concentration. However, the Agency must  
 2581 allow sampling for a site-specific subset of constituents from the  
 2582 Appendix I list of this Part and for other representative or related waste  
 2583 constituents if it determines that sampling for that site-specific subset of  
 2584 contaminants and other constituents is more economical and equally  
 2585 effective for determining whether groundwater contamination has  
 2586 occurred.

- 2587
- 2588 3) For any compounds in Appendix I of this Part found in the analysis  
 2589 pursuant to subsection (g)(2) of this Section, the owner or operator may  
 2590 resample within one month or at an alternative site-specific schedule  
 2591 approved by the Agency and repeat the analysis for those compounds  
 2592 detected. If the results of the second analysis confirm the initial results,  
 2593 then these constituents will form the basis for compliance monitoring. If  
 2594 the owner or operator does not resample for the compounds set forth in  
 2595 subsection (g)(2) of this Section, the hazardous constituents found during  
 2596 this initial Appendix I analysis will form the basis for compliance  
 2597 monitoring.
- 2598
- 2599 4) Within 90 days, submit to the Agency an application for a permit  
 2600 modification to establish a compliance monitoring program meeting the  
 2601 requirements of Section 724.199. The application must include the  
 2602 following information:
- 2603
- 2604 A) An identification of the concentration of any constituent in  
 2605 Appendix I of this Part detected in the groundwater at each  
 2606 monitoring well at the compliance point;
- 2607
- 2608 B) Any proposed changes to the groundwater monitoring system at  
 2609 the facility necessary to meet the requirements of Section 724.199;
- 2610
- 2611 C) Any proposed additions or changes to the monitoring frequency,  
 2612 sampling and analysis procedures or methods, or statistical  
 2613 methods used at the facility necessary to meet the requirements of  
 2614 Section 724.199;
- 2615
- 2616 D) For each hazardous constituent detected at the compliance point, a  
 2617 proposed concentration limit under Section 724.194(a)(1) or (a)(2),  
 2618 or a notice of intent to seek an alternate concentration limit under  
 2619 Section 724.194(b).
- 2620
- 2621 5) Within 180 days, submit the following to the Agency:
- 2622

- 2623  
2624  
2625  
2626  
2627  
2628  
2629  
2630  
2631  
2632  
2633  
2634  
2635  
2636  
2637  
2638  
2639  
2640  
2641  
2642  
2643  
2644  
2645  
2646  
2647  
2648  
2649  
2650  
2651  
2652  
2653  
2654  
2655  
2656  
2657  
2658  
2659  
2660  
2661  
2662  
2663  
2664  
2665
- 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.
  - 6) 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,

2666 or evaluation;  
2667

2668 C) Within 90 days, submit to the Agency an application for a permit  
2669 modification to make any appropriate changes to the detection  
2670 monitoring program facility; and

2671  
2672 D) Continue to monitor in accordance with the detection monitoring  
2673 program established under this Section.  
2674

2675 h) If the owner or operator determines that the detection monitoring program no  
2676 longer satisfies the requirements of this Section, the owner or operator must,  
2677 within 90 days, submit an application for a permit modification to make any  
2678 appropriate changes to the program.  
2679

2680 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
2681

2682 **Section 724.199 Compliance Monitoring Program**  
2683

2684 An owner or operator required to establish a compliance monitoring program under this Subpart  
2685 F must, at a minimum, discharge the following responsibilities:  
2686

2687 a) The owner or operator must monitor the groundwater to determine whether  
2688 regulated units are in compliance with the groundwater protection standard under  
2689 Section 724.192. The Agency must specify the groundwater protection standard  
2690 in the facility permit, including the following:  
2691

- 2692 1) A list of the hazardous constituents identified under Section 724.193;
- 2693 2) Concentration limits under Section 724.194 for each of those hazardous  
2694 constituents;
- 2695 3) The compliance point under Section 724.195; and  
2696
- 2697 4) The compliance period under Section 724.196.  
2698

2700  
2701 b) The owner or operator must install a groundwater monitoring system at the  
2702 compliance point as specified under Section 724.195. The groundwater  
2703 monitoring system must comply with Section 724.197(a)(2), 724.197(b), and  
2704 724.197(c).  
2705

2706 c) The Agency must specify the sampling procedures and statistical methods  
2707 appropriate for the constituents and facility, consistent with Section 724.197(g)  
2708 and (h).

- 2709  
 2710  
 2711  
 2712  
 2713  
 2714  
 2715  
 2716  
 2717  
 2718  
 2719  
 2720  
 2721  
 2722  
 2723  
 2724  
 2725  
 2726  
 2727  
 2728  
 2729  
 2730  
 2731  
 2732  
 2733  
 2734  
 2735  
 2736  
 2737  
 2738  
 2739  
 2740  
 2741  
 2742  
 2743  
 2744  
 2745  
 2746  
 2747  
 2748  
 2749  
 2750  
 2751
- 1) The owner or operator must conduct a sampling program for each chemical parameter or hazardous constituent in accordance with Section 724.197(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).
  - g) The owner or operator must annually 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). 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

2752 monitoring wells at the compliance point to undergo enhanced sampling; the  
 2753 number of samples to be collected from each of these monitoring wells; and, the  
 2754 specific constituents from Appendix I of this Part for which these samples must  
 2755 be analyzed. If the enhanced sampling event indicates that Appendix I  
 2756 constituents are present in the ground water that are not already identified in the  
 2757 permit as monitoring constituents, the owner or operator may resample within one  
 2758 month or at an alternative site-specific schedule approved by the Agency, and  
 2759 repeat the analysis. If the second analysis confirms the presence of new  
 2760 constituents, the owner or operator must report the concentration of these  
 2761 additional constituents to the Agency within seven days after the completion of  
 2762 the second analysis and add them to the monitoring list. If the owner or operator  
 2763 chooses not to resample, then it must report the concentrations of these additional  
 2764 constituents to the Agency within seven days after completion of the initial  
 2765 analysis, and add them to the monitoring list.  
 2766

2767 h) If the owner or operator determines, pursuant to subsection (d) of this Section that  
 2768 any concentration limits under Section 724.194 are being exceeded at any  
 2769 monitoring well at the point of compliance, the owner or operator must do the  
 2770 following:  
 2771

- 2772 1) Notify the Agency of this finding in writing within seven days. The  
 2773 notification must indicate what concentration limits have been exceeded.  
 2774
- 2775 2) Submit to the Agency an application for a permit modification to establish  
 2776 a corrective action program meeting the requirements of Section 724.200  
 2777 within 180 days, or within 90 days if an engineering feasibility study has  
 2778 been previously submitted to the Agency under Section 724.198(g)(5).  
 2779 The application must at a minimum include the following information:  
 2780
  - 2781 A) A detailed description of corrective actions that will achieve  
 2782 compliance with the groundwater protection standard specified in  
 2783 the permit under subsection (a) of this Section; and  
 2784
  - 2785 B) A plan for a groundwater monitoring program that will  
 2786 demonstrate the effectiveness of the corrective action. Such a  
 2787 groundwater monitoring program may be based on a compliance  
 2788 monitoring program developed to meet the requirements of this  
 2789 Section.  
 2790

2791 i) If the owner or operator determines, pursuant to subsection (d) of this Section,  
 2792 that the groundwater concentration limits under this Section are being exceeded at  
 2793 any monitoring well at the point of compliance, the owner or operator may  
 2794 demonstrate that a source other than a regulated unit caused the contamination or

2795 that the detection is an artifact caused by an error in sampling, analysis, or  
 2796 statistical evaluation, or natural variation in groundwater. In making a  
 2797 demonstration under this subsection (i), the owner or operator must do the  
 2798 following:

- 2800 1) Notify the Agency in writing within seven days that it intends to make a  
 2801 demonstration under this subsection (i);
  - 2802 2) Within 90 days, submit a report to the Agency that demonstrates that a  
 2803 source other than a regulated unit caused the standard to be exceeded or  
 2804 that the apparent noncompliance with the standards resulted from error in  
 2805 sampling, analysis, or evaluation;
  - 2806 3) Within 90 days, submit to the Agency an application for a permit  
 2807 modification to make any appropriate changes to the compliance  
 2808 monitoring program at the facility; and
  - 2809 4) Continue to monitor in accord with the compliance monitoring program  
 2810 established under this Section.
- 2811
- 2812 j) If the owner or operator determines that the compliance monitoring program no  
 2813 longer satisfies the requirements of this Section, the owner or operator must,  
 2814 within 90 days, submit an application for a permit modification to make any  
 2815 appropriate changes to the program.

2816 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

2817  
 2818  
 2819  
 2820  
 2821  
**2822 Section 724.200 Corrective Action Program**

2823 An owner or operator required to establish a corrective action program pursuant to this Subpart F  
 2824 must, at a minimum, discharge the following responsibilities:

- 2825 a) The owner or operator must take corrective action to ensure that regulated units  
 2826 are in compliance with the groundwater protection standard pursuant to Section  
 2827 724.192. The Agency must specify the groundwater protection standard in the  
 2828 facility permit, including the following:
- 2829 1) A list of the hazardous constituents identified pursuant to Section 724.193;
  - 2830 2) Concentration limits pursuant to Section 724.194 for each of those  
 2831 hazardous constituents;
  - 2832 3) The compliance point pursuant to Section 724.195; and
- 2833  
 2834  
 2835  
 2836  
 2837

- 2838  
 2839  
 2840  
 2841  
 2842  
 2843  
 2844  
 2845  
 2846  
 2847  
 2848  
 2849  
 2850  
 2851  
 2852  
 2853  
 2854  
 2855  
 2856  
 2857  
 2858  
 2859  
 2860  
 2861  
 2862  
 2863  
 2864  
 2865  
 2866  
 2867  
 2868  
 2869  
 2870  
 2871  
 2872  
 2873  
 2874  
 2875  
 2876  
 2877  
 2878  
 2879  
 2880
- 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.

2881  
2882  
2883  
2884  
2885  
2886  
2887  
2888  
2889  
2890  
2891  
2892  
2893  
2894  
2895  
2896  
2897  
2898  
2899  
2900  
2901  
2902  
2903  
2904  
2905  
2906  
2907  
2908  
2909  
2910  
2911  
2912  
2913  
2914  
2915  
2916  
2917  
2918  
2919  
2920  
2921  
2922  
2923

- 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 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 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.201 Corrective Action for Solid Waste Management Units**

- a) The owner or operator of a facility seeking a permit for the treatment, storage, or disposal of hazardous waste must institute corrective action as necessary to adequately protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.

2924  
 2925  
 2926  
 2927  
 2928  
 2929  
 2930  
 2931  
 2932  
 2933  
 2934  
 2935  
 2936  
 2937  
 2938  
 2939  
 2940  
 2941  
 2942  
 2943  
 2944  
 2945  
 2946  
 2947  
 2948  
 2949  
 2950  
 2951  
 2952  
 2953  
 2954  
 2955  
 2956  
 2957  
 2958  
 2959  
 2960  
 2961  
 2962  
 2963  
 2964  
 2965  
 2966

- b) Corrective action will be specified in the permit in accordance with this Section and Subpart S of this Part. The permit will contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.
- c) The owner or operator must implement corrective action measures beyond the facility property boundary, where necessary to adequately protect human health and the environment, unless the owner or operator demonstrates to the Agency that, despite the owner or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such actions. 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. Assurances of financial responsibility for such corrective action must be provided.
- d) This Section does not apply to remediation waste management sites unless they are part of a facility subject to a permit for treating, storing, or disposing of hazardous wastes that are not remediation wastes.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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 on-site, 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:

- 2967  
2968  
2969  
2970  
2971  
2972  
2973  
2974  
2975  
2976  
2977  
2978  
2979  
2980  
2981  
2982  
2983  
2984  
2985  
2986  
2987  
2988  
2989  
2990  
2991  
2992  
2993  
2994  
2995  
2996  
2997  
2998  
2999  
3000  
3001  
3002  
3003  
3004  
3005  
3006  
3007  
3008  
3009
- 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;

- 3010  
3011  
3012  
3013  
3014  
3015  
3016  
3017  
3018  
3019  
3020  
3021  
3022
- ii) There is reasonable likelihood that the owner or operator 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 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.
- 3023  
3024  
3025
- c) The demonstration referred to in subsections (a)(1) and (b)(1) ~~of this Section~~ must be made as follows:
- 3026  
3027  
3028  
3029
- 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~~.
- 3030  
3031  
3032  
3033  
3034
- 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:
- 3035  
3036  
3037  
3038  
3039
- 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:
    - 3040  
3041  
3042  
3043
    - A) That the unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes;
    - 3044  
3045  
3046
    - 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;
    - 3047  
3048  
3049  
3050
    - C) That the non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and
    - 3051  
3052

- 3053 operating requirements of the unit or facility pursuant to this Part;  
3054  
3055 D) That closure of the hazardous waste management unit would be  
3056 incompatible with continued operation of the unit or facility; and  
3057  
3058 E) That the owner or operator is operating and will continue to  
3059 operate in compliance with all applicable permit requirements;  
3060  
3061 2) The request to modify the permit includes an amended waste analysis  
3062 plan, groundwater monitoring and response program, human exposure  
3063 assessment required pursuant to 35 Ill. Adm. Code 703.186, and closure  
3064 and post-closure plans and updated cost estimates and demonstrations of  
3065 financial assurance for closure and post-closure care, as necessary and  
3066 appropriate, to reflect any changes due to the presence of hazardous  
3067 constituents in the non-hazardous wastes, and changes in closure  
3068 activities, including the expected year of closure if applicable pursuant to  
3069 Section 724.212(b)(7), as a result of the receipt of non-hazardous wastes  
3070 following the final receipt of hazardous wastes;  
3071  
3072 3) The request to modify the permit includes revisions, as necessary and  
3073 appropriate, to affected conditions of the permit to account for the receipt  
3074 of non-hazardous wastes following receipt of the final volume of  
3075 hazardous wastes; and  
3076  
3077 4) The request to modify the permit and the demonstrations referred to in  
3078 subsections (d)(1) and (d)(2) ~~of this Section~~ are submitted to the Agency  
3079 no later than 120 days prior to the date on which the owner or operator of  
3080 the facility receives the known final volume of hazardous wastes at the  
3081 unit or no later than 90 days after the effective date of this Section,  
3082 whichever is later.  
3083  
3084 e) Surface impoundments. In addition to the requirements in subsection (d) ~~of this~~  
3085 ~~Section~~, an owner or operator of a hazardous waste surface impoundment that is  
3086 not in compliance with the liner and leachate collection system requirements in  
3087 Section 724.321(c), (d), or (e) must receive non-hazardous wastes only as  
3088 authorized by an adjusted standard pursuant to this subsection (e).  
3089  
3090 1) The petition for adjusted standard must include the following:  
3091  
3092 A) A plan for removing hazardous wastes; and  
3093  
3094 B) A contingent corrective measures plan.  
3095

- 3096  
3097  
3098  
3099  
3100  
3101  
3102  
3103  
3104  
3105  
3106  
3107  
3108  
3109  
3110  
3111  
3112  
3113  
3114  
3115  
3116  
3117  
3118  
3119  
3120  
3121  
3122  
3123  
3124  
3125  
3126  
3127  
3128  
3129  
3130  
3131  
3132  
3133  
3134  
3135  
3136  
3137  
3138
- 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.

3139  
3140  
3141  
3142  
3143  
3144  
3145  
3146  
3147  
3148  
3149  
3150  
3151  
3152  
3153  
3154  
3155  
3156  
3157  
3158  
3159  
3160  
3161  
3162  
3163  
3164  
3165  
3166  
3167  
3168  
3169  
3170  
3171  
3172  
3173  
3174  
3175  
3176  
3177  
3178  
3179  
3180  
3181

- 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) Annual report. During the period of corrective action, the owner or operator must provide annual reports to the Agency that do the following:
  - A) They must describe the progress of the corrective action program;
  - B) They must compile all groundwater monitoring data; and
  - C) 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

3182 accordance with the approved contingent corrective measures plan.  
3183

3184 B) The Board will terminate the adjusted standard if the owner or  
3185 operator fails to make substantial progress in implementing the  
3186 corrective measures plan and achieving the facility's groundwater  
3187 protection standard, or background levels if the facility has not yet  
3188 established a groundwater protection standard.  
3189

3190 C) The adjusted standard will automatically terminate if the owner or  
3191 operator fails to implement the removal plan.  
3192

3193 D) The adjusted standard will automatically terminate if the owner or  
3194 operator fails to timely file a required petition for adjusted  
3195 standard.  
3196

3197 8) Adjusted standard procedures. The following procedures must be used in  
3198 granting, modifying or terminating an adjusted standard pursuant to this  
3199 subsection (e).  
3200

3201 A) Except as otherwise provided, the owner or operator must follow  
3202 the procedures of Section 28.1 of the Act [415 ILCS 5/28.1] and 35  
3203 Ill. Adm. Code 101 and 104 to petition the Board for an adjusted  
3204 standard.  
3205

3206 B) Initial justification. The Board will grant an adjusted standard  
3207 pursuant to subsection (e)(1) ~~of this Section~~ if the owner or  
3208 operator demonstrates that the removal plan and contingent  
3209 corrective measures plans meet the requirements of subsections  
3210 (e)(2) and (e)(3) ~~of this Section~~.  
3211

3212 C) The Board will include the following conditions in granting an  
3213 adjusted standard pursuant to subsection (e)(1) ~~of this Section~~:  
3214

3215 i) A plan for removing hazardous wastes.  
3216

3217 ii) A requirement that the owner or operator remove hazardous  
3218 wastes in accordance with the plan.  
3219

3220 iii) A contingent corrective measures plan.  
3221

3222 iv) A requirement that, in the event of a release, the owner or  
3223 operator must do as follows: within 35 days, file with the  
3224 Board a petition for adjusted standard; implement the

3225 corrective measures plan; and, file semi-annual reports with  
3226 the Agency.

3227  
3228 v) A condition that the adjusted standard will terminate if the  
3229 owner or operator fails to do as follows: implement the  
3230 removal plan; or timely file a required petition for adjusted  
3231 standard.

3232  
3233 vi) A requirement that, in the event the adjusted standard is  
3234 terminated, the owner or operator must commence closure  
3235 of the unit in accordance with the requirements of the  
3236 closure plan and this Part.

3237  
3238 D) Justification in the event of a release. The Board will modify or  
3239 terminate the adjusted standard pursuant to a petition filed pursuant  
3240 to subsection (e)(5)(A) ~~of this Section~~, as provided in that  
3241 subsection or in subsection (e)(7) ~~of this Section~~.

3242  
3243 9) The Agency must modify the RCRA permit to include the adjusted  
3244 standard.

3245  
3246 10) The owner or operator may file a permit modification application with a  
3247 revised closure plan within 15 days after an adjusted standard is  
3248 terminated.

3249  
3250 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
3251

3252 **Section 724.216 Survey Plat**  
3253

3254 No later than the submission of the certification of closure of each hazardous waste disposal unit,  
3255 the owner or operator must submit to any local zoning authority or authority with jurisdiction  
3256 over local land use and to the Agency and record with land titles, a survey plat indicating the  
3257 location and dimensions of landfill cells or other hazardous waste disposal units with respect to  
3258 permanently surveyed benchmarks. This plat must be prepared and certified by a professional  
3259 land surveyor. The plat filed with the local zoning authority or the authority with jurisdiction  
3260 over local land use must contain a note, prominently displayed, that states the owner's and  
3261 operator's obligation to restrict disturbance of the hazardous waste disposal unit in accordance  
3262 with the applicable regulations of Subpart G ~~of this Part~~.

3263  
3264 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
3265

3266 **Section 724.217 Post-Closure Care and Use of Property**  
3267

- 3268 a) Post-Closure care period.  
3269  
3270 1) Post-closure care for each hazardous waste management unit subject to the  
3271 requirements of Sections 724.217 through 724.220 must begin after  
3272 completion of closure of the unit and continue for 30 years after that date  
3273 and must consist of at least the following:  
3274  
3275 A) Monitoring and reporting in accordance with the requirements of  
3276 Subparts F, K, L, M, N, and X ~~of this Part~~; and  
3277  
3278 B) Maintenance and monitoring of waste containment systems in  
3279 accordance with the requirements of Subparts F, K, L, M, N, and X  
3280 ~~of this Part~~.  
3281  
3282 2) Any time preceding partial closure of a hazardous waste management unit  
3283 subject to post-closure care requirements or final closure, or any time  
3284 during the post-closure care period for a particular unit, the Board may, in  
3285 accordance with the permit modification procedures of 35 Ill. Adm. Code  
3286 702, 703, and 705, do either of the following:  
3287  
3288 A) Shorten the post-closure care period applicable to the hazardous  
3289 waste management unit or facility if all disposal units have been  
3290 closed and the Board has found by an adjusted standard issue  
3291 pursuant to Section 28.1 of the Act ~~{415 ILCS 5/28.1}~~ and 35 Ill.  
3292 Adm. Code 101 and 104 that the reduced period is sufficient to  
3293 adequately protect human health and the environment (e.g.,  
3294 leachate or groundwater monitoring results, characteristics of the  
3295 waste, application of advanced technology or alternative disposal,  
3296 treatment or re-use techniques indicate that the hazardous waste  
3297 management unit or facility is secure); or  
3298  
3299 B) Extend the post-closure care period applicable to the hazardous  
3300 waste management unit or facility if the Board has found by an  
3301 adjusted standard issue pursuant to Section 28.1 of the Act ~~{415~~  
3302 ~~ILCS 5/28.1}~~ and 35 Ill. Adm. Code 101 and 104 that the extended  
3303 period is necessary to adequately protect human health and the  
3304 environment (e.g., leachate or groundwater monitoring results  
3305 indicate a potential for migration of hazardous wastes at levels that  
3306 may be harmful to human health and the environment).  
3307  
3308 b) The Agency must require continuation at partial or final closure of any of the  
3309 security requirements of Section 724.114 during part or all of the post-closure  
3310 period when either of the following is true:

- 3311  
3312 1) Hazardous wastes may remain exposed after completion of partial or final  
3313 closure; or  
3314  
3315 2) Access by the public or domestic livestock may pose a hazard to human  
3316 health.  
3317  
3318 c) Post-closure use of property on or in which hazardous wastes remain after partial  
3319 or final closure must never be allowed to disturb the integrity of the final cover,  
3320 liners, or any other components of the containment system or the function of the  
3321 facility's monitoring systems, unless the Agency finds, by way of a permit  
3322 modification, that the disturbance is necessary for either of the following reasons:  
3323  
3324 1) It is necessary to the proposed use of the property, and will not increase  
3325 the potential hazard to human health or the environment; or  
3326  
3327 2) It is necessary to reduce a threat to human health or the environment.  
3328  
3329 d) All the post-closure care activities must be in accordance with the provisions of  
3330 the approved post-closure plan as specified in Section 724.218.  
3331

3332 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
3333

3334 **Section 724.218 Post-Closure Care Plan; Amendment of Plan**  
3335

- 3336 a) Written Plan. The owner or operator of a hazardous waste disposal unit must  
3337 have a written post-closure care plan. In addition, certain surface impoundments  
3338 and waste piles from which the owner or operator intends to remove or  
3339 decontaminate the hazardous wastes at partial or final closure are required by  
3340 Sections 724.328(c)(1)(B) and 724.358(c)(1)(B) to have contingent post-closure  
3341 care plans. Owners or operators of surface impoundments and waste piles not  
3342 otherwise required to prepare contingent post-closure care plans under Sections  
3343 724.328(c)(1)(B) or 724.358(c)(1)(B) must submit a post-closure care plan to the  
3344 Agency within 90 days from the date that the owner or operator or Agency  
3345 determines that the hazardous waste management unit must be closed as a landfill,  
3346 subject to the requirements of Sections 724.217 through 724.220. The plan must  
3347 be submitted with the permit application, in accordance with 35 Ill. Adm. Code  
3348 703.183, and approved by the Agency as part of the permit issuance proceeding  
3349 under 35 Ill. Adm. Code 705. In accordance with 35 Ill. Adm. Code 703.241, the  
3350 approved post-closure care plan will become a condition of any RCRA permit  
3351 issued.  
3352  
3353 b) For each hazardous waste management unit subject to the requirements of this

3354 Section, the post-closure care plan must identify the activities that will be carried  
 3355 on after closure and the frequency of these activities, and include at least the  
 3356 following:  
 3357

- 3358 1) A description of the planned monitoring activities and frequencies that  
 3359 they will be performed to comply with Subparts F, K, L, M, N, and X of  
 3360 ~~this Part~~ during the post-closure care period.
- 3361
- 3362 2) A description of the planned maintenance activities, and frequencies at  
 3363 which they will be performed, to ensure the following:  
 3364
  - 3365 A) The integrity of the cap and final cover or other containment  
 3366 systems in accordance with the requirements of Subparts F, K, L,  
 3367 M, N, and X of ~~this Part~~; and
  - 3368
  - 3369 B) The function of the facility monitoring equipment in accordance  
 3370 with the requirements of Subparts F, K, L, M, N, and X of ~~this~~  
 3371 ~~Part~~.
- 3372
- 3373 3) The name, address, and phone number of the person or office to contact  
 3374 about the hazardous disposal unit during the post-closure care period.  
 3375
- 3376 4) For a facility where alternative requirements are established at a regulated  
 3377 unit under Section 724.190(f), 724.210(c), or 724.240(d), as provided  
 3378 under 35 Ill. Adm. Code 703.161, either the alternative requirements that  
 3379 apply to the regulated unit, or a reference to the enforceable document  
 3380 containing those requirements.
- 3381
- 3382 c) Until final closure of the facility, a copy of the approved post-closure care plan  
 3383 must be furnished to the Agency upon request, including request by mail. After  
 3384 final closure has been certified, the person or office specified in subsection (b)(3)  
 3385 of ~~this Section~~ must keep the approved post-closure care plan during the  
 3386 remainder of the post-closure care period.
- 3387
- 3388 d) Amendment of plan. The owner or operator must submit a written notification of  
 3389 or request for a permit modification to authorize a change in the approved post-  
 3390 closure care plan in accordance with the applicable requirements of 35 Ill. Adm.  
 3391 Code 703 and 705. The written notification or request must include a copy of the  
 3392 amended post-closure care plan for review or approval by the Agency.
- 3393
- 3394 1) The owner or operator may submit a written notification or request to the  
 3395 Agency for a permit modification to amend the post-closure care plan at  
 3396 any time during the active life of the facility or during the post-closure

- 3397 care period.  
 3398  
 3399 2) The owner or operator must submit a written notification of or request for  
 3400 a permit modification to authorize a change in the approved post-closure  
 3401 care plan whenever any of the following occurs:  
 3402  
 3403 A) Changes in operating plans or facility design affect the post-  
 3404 closure care plan;  
 3405  
 3406 B) There is a change in the expected year of closure if applicable;  
 3407  
 3408 C) Events occur during the active life of the facility, including partial  
 3409 and final closures, that affect the approved post-closure care plan;  
 3410 or  
 3411  
 3412 D) The owner or operator requests establishment of alternative  
 3413 requirements to a regulated unit under Section 724.190(f),  
 3414 724.210(c), or 724.240(d).  
 3415  
 3416 3) The owner or operator must submit a written request for a permit  
 3417 modification at least 60 days prior to the proposed change in facility  
 3418 design or operation, or no later than 60 days after an unexpected event has  
 3419 occurred that has affected the post-closure care plan. An owner or  
 3420 operator of a surface impoundment or waste pile that intends to remove all  
 3421 hazardous waste at closure and is not otherwise required to submit a  
 3422 contingent post-closure care plan under Sections 724.328(c)(1)(B) or  
 3423 724.358(c)(1)(B) must submit a post-closure care plan to the Agency no  
 3424 later than 90 days after the date that the owner or operator or Agency  
 3425 determines that the hazardous waste management unit must be closed as a  
 3426 landfill, subject to the requirements of Section 724.410. The Agency must  
 3427 approve, disapprove, or modify this plan in accordance with the procedure  
 3428 in 35 Ill. Adm. Code 703 and 705. In accordance with 35 Ill. Adm. Code  
 3429 703.241, the approved post-closure care plan will become a permit  
 3430 condition.  
 3431  
 3432 4) The Agency may request modifications to the plan under the conditions  
 3433 described in subsection (d)(2) of this Section. The owner or operator must  
 3434 submit the modified plan no later than 60 days after the request, or no later  
 3435 than 90 days if the unit is a surface impoundment or waste pile not  
 3436 previously required to prepare a contingent post-closure care plan. Any  
 3437 modifications requested by the Agency must be approved, disapproved, or  
 3438 modified in accordance with the procedure in 35 Ill. Adm. Code 703 and  
 3439 705.

3440  
3441  
3442  
3443  
3444  
3445  
3446  
3447  
3448  
3449  
3450  
3451  
3452  
3453  
3454  
3455  
3456  
3457  
3458  
3459  
3460  
3461  
3462  
3463  
3464  
3465  
3466  
3467  
3468  
3469  
3470  
3471  
3472  
3473  
3474  
3475  
3476  
3477  
3478  
3479  
3480  
3481  
3482

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.219 Post-Closure Notices**

- a) No later than 60 days after certification of closure of each hazardous waste disposal unit, the owner or operator of a disposal facility must submit to the Agency, to the County Recorder and to any local zoning authority or authority with jurisdiction over local land use, a record of the type, location, and quantity of hazardous wastes disposed of within each cell or other disposal unit of the facility. For hazardous wastes disposed of before January 12, 1981, the owner or operator must identify the type, location, and quantity of the hazardous waste to the best of the owner or operator's knowledge and in accordance with any records the owner or operator has kept.
- b) Within 60 days after certification of closure of the first hazardous waste disposal unit and within 60 days after certification of closure of the last hazardous waste disposal unit, the owner or operator must do the following:
  - 1) Record a notation on the deed to the facility property, or on some other instrument that is normally examined during title search, that will in perpetuity notify any potential purchaser of the property as follows:
    - A) That the land has been used to manage hazardous wastes; and
    - B) That its use is restricted pursuant to this Subpart G; and
    - C) That the survey plat and record of the type, location and quantity of hazardous wastes disposed of within each cell or other hazardous waste disposal unit of the facility required by subsection (a) of this Section and Section 724.216 have been filed with the Agency, the County Recorder and any local zoning authority or authority with jurisdiction over local land use; and
  - 2) Submit a certification to the Agency, signed by the owner or operator, that the owner or operator has recorded the notation specified in subsection (b)(1) of this Section, including a copy of the document in which the notation has been placed, to the Agency.
- c) If the owner or operator or any subsequent owner or operator of the land upon which a hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner, if any, or contaminated soils, such person must request a modification to the post-closure plan in accordance with the

3483 applicable requirements in 35 Ill. Adm. Code 703 and 705. The owner and  
3484 operator must demonstrate that the removal of hazardous wastes will satisfy the  
3485 criteria of Section 724.217(c). By removing hazardous waste, the owner or  
3486 operator may become a generator of hazardous waste and must manage it in  
3487 accordance with all applicable requirements of 35 Ill. Adm. Code 703 and 720  
3488 through 728, and 738. If the owner or operator is granted a permit modification or  
3489 otherwise granted approval to conduct such removal activities, the owner or  
3490 operator may request that the Agency approve either of the following:

- 3491
- 3492 1) The removal of the notation on the deed to the facility property or other  
3493 instrument normally examined during title search; or
  - 3494
  - 3495 2) The addition of a notation to the deed or instrument indicating the removal  
3496 of the hazardous waste.

3497  
3498 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
3499

#### 3500 SUBPART H: FINANCIAL REQUIREMENTS

##### 3501 **Section 724.241 Definitions of Terms as Used in This Subpart**

3502 For the purposes of this Subpart H, the following terms have the given meanings:  
3503

- 3504 a) "Closure plan" means the plan for closure prepared in accordance with the  
3505 requirements of Section 724.212.
  - 3506 b) "Current closure cost estimate" means that the most recent of the estimates  
3507 prepared in accordance with Section 724.242(a), (b), and (c).
  - 3508 c) "Current post-closure cost estimate" means the most recent of the estimates  
3509 prepared in accordance with Section 724.244(a), (b), and (c).
  - 3510 d) "Parent corporation" means a corporation that directly owns at least 50 percent of  
3511 the voting stock of the corporation which is the facility owner or operator; the  
3512 latter corporation is deemed a "subsidiary" of the parent corporation.
  - 3513 e) "Post-closure plan" means the plan for post-closure care prepared in accordance  
3514 with the requirements of Sections 724.217 through 724.220.
  - 3515 f) The following terms are used in the specifications for the financial test for  
3516 closure, post-closure care, and liability coverage. The definitions are intended to  
3517 assist in the understanding of these regulations and are not intended to limit the  
3518 meanings of terms in a way that conflicts with generally accepted accounting  
3519
- 3520  
3521  
3522  
3523  
3524  
3525

3526 practices.  
3527  
3528 "Assets" means all existing and all probable future economic benefits  
3529 obtained or controlled by a particular entity.  
3530  
3531 "Current assets" means cash or other assets or resources commonly  
3532 identified as those that are reasonably expected to be realized in cash or  
3533 sold or consumed during the normal operating cycle of the business.  
3534  
3535 "Current liabilities" means obligations whose liquidation is reasonably  
3536 expected to require the use of existing resources properly classifiable as  
3537 current assets or the creation of other current liabilities.  
3538  
3539 "Current plugging and abandonment cost estimate" means the most recent  
3540 of the estimates prepared in accordance with 35 Ill. Adm. Code  
3541 704.212(a), (b), and (c).  
3542  
3543 "Independently audited" refers to an audit performed by an independent  
3544 certified public accountant in accordance with generally accepted auditing  
3545 standards.  
3546  
3547 "Liabilities" means probable future sacrifices of economic benefits arising  
3548 from present obligations to transfer assets or provide services to other  
3549 entities in the future as a result of past transactions or events.  
3550  
3551 "Net working capital" means current assets minus current liabilities.  
3552  
3553 "Net worth" means total assets minus total liabilities and is equivalent to  
3554 owner's equity.  
3555  
3556 "Tangible net worth" means the tangible assets that remain after deducting  
3557 liabilities; such assets would not include intangibles, such as goodwill and  
3558 rights to patents or royalties.  
3559  
3560 g) In the liability insurance requirements the terms "bodily injury" and "property  
3561 damage" have the meanings given below. The Board intends the meanings of  
3562 other terms used in the liability insurance requirements to be consistent with their  
3563 common meanings within the insurance industry. The definitions given below of  
3564 several of the terms are intended to assist in the understanding of these regulations  
3565 and are not intended to limit their meanings in a way that conflicts with general  
3566 insurance industry usage.  
3567  
3568 "Accidental occurrence" means an accident, including continuous or

3569 repeated exposure to conditions, that results in bodily injury or property  
3570 damage neither expected nor intended from the standpoint of the insured.

3571  
3572 "Bodily injury" means bodily injury, sickness, or disease sustained by a  
3573 person, including death resulting from any of these at any time. However,  
3574 this term does not include those liabilities that, consistent with standard  
3575 insurance industry practices, are excluded from coverage in liability  
3576 insurance policies for bodily injury.

3577  
3578 BOARD NOTE: Derived from the Insurance Services Office, Inc.  
3579 definition of this term.

3580  
3581 "Environmental damage" means the injurious presence in or upon land,  
3582 the atmosphere, or any watercourse or body of water of solid, liquid,  
3583 gaseous, or thermal contaminants, irritants, or pollutants.

3584  
3585 BOARD NOTE: Derived from the Insurance Services Office, Inc.  
3586 definition of this term. This term is used in the definition of "pollution  
3587 incident:".

3588  
3589 "Legal defense costs" means any expenses that an insurer incurs in  
3590 defending against claims of third parties brought under the terms and  
3591 conditions of an insurance policy.

3592  
3593 "Nonsudden accidental occurrence" means an occurrence that takes place  
3594 over time and involves continuous or repeated exposure.

3595  
3596 "Pollutants" means any solid, liquid, gaseous or thermal irritant or  
3597 contaminant, including smoke, vapor, soot, fumes, acids, alkalis,  
3598 chemicals, and waste.

3599  
3600 BOARD NOTE: Derived from the Insurance Services Office, Inc.  
3601 definition of this term. This definition is used in the definition of  
3602 "pollution incident:".

3603  
3604 "Pollution incident" means emission, discharge, release, or escape of  
3605 pollutants into or upon land, the atmosphere or any watercourse or body of  
3606 water, provided that such emission, discharge, release, or escape results in  
3607 "environmental damage:". The entirety of any such emission, discharge,  
3608 release, or escape must be deemed to be one "pollution incident:". "Waste"  
3609 includes materials to be recycled, reconditioned, or reclaimed. The term  
3610 "pollution incident" includes an "occurrence:".

3611

3612 BOARD NOTE: Derived from the Insurance Services Office, Inc.  
3613 definition of this term. This definition is used in the definition of  
3614 "property damage."  
3615

3616 "Property damage" means as follows:  
3617

3618 Either of the following:  
3619

3620 Physical injury to, destruction of or contamination of  
3621 tangible property, including all resulting loss of use of that  
3622 property; or  
3623

3624 Loss of use of tangible property that is not physically  
3625 injured, destroyed or contaminated, but has been evacuated,  
3626 withdrawn from use or rendered inaccessible because of a  
3627 "pollution incident-";  
3628

3629 This term does not include those liabilities that, consistent with  
3630 standard insurance industry practices, are excluded from coverage  
3631 in liability insurance policies for property damage.  
3632

3633 BOARD NOTE: Derived from the Insurance Services Office, Inc.  
3634 definition of this term.  
3635

3636 "Sudden accidental occurrence" means an occurrence that is not  
3637 continuous or repeated in nature.  
3638

3639 h) "Substantial business relationship" means the extent of a business relationship  
3640 necessary under applicable state law to make a guarantee contract issued incident  
3641 to that relationship valid and enforceable. A "substantial business relationship"  
3642 must arise from a pattern of recent or ongoing business transactions, in addition to  
3643 the guarantee itself, such that the Agency can reasonably determine that a  
3644 substantial business relationship currently exists between the guarantor and the  
3645 owner or operator that is adequate consideration to support the obligation of the  
3646 guarantee relating to any liability towards a third-party. "Applicable state law,"  
3647 as used in this subsection (h), means the laws of the State of Illinois and those of  
3648 any sister state that govern the guarantee and the adequacy of the consideration.  
3649

3650 BOARD NOTE: Derived from 40 CFR 264.141(h) (2017)(2014) and the  
3651 discussion at 53 Fed. Reg. 33938, 33941-33943 (Sep. 1, 1988). This term is also  
3652 independently defined in 35 Ill. Adm. Code 725.141(h) and 727.240(b)(8). Any  
3653 Agency determination that a substantial business relationship exists is subject to  
3654 Board review pursuant to Section 40 of the Act [415 ILCS 5/40].

3655  
3656  
3657  
3658  
3659  
3660  
3661  
3662  
3663  
3664  
3665  
3666  
3667  
3668  
3669  
3670  
3671  
3672  
3673  
3674  
3675  
3676  
3677  
3678  
3679  
3680  
3681  
3682  
3683  
3684  
3685  
3686  
3687  
3688  
3689  
3690  
3691  
3692  
3693  
3694  
3695  
3696  
3697

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.242 Cost Estimate for Closure**

- a) The owner or operator must have detailed a written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections 724.211 through 724.215 and applicable closure requirements in Sections 724.278, 724.297, 724.328, 724.358, 724.380, 724.410, 724.451, 724.701 through 724.703, and 724.1102.
  - 1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see Section 724.212(b)).
  - 2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in Section 724.241(d)). The owner or operator may use costs for on-site disposal if the owner or operator demonstrates that on-site disposal capacity will exist at all times over the life of the facility.
  - 3) The closure cost estimate must not incorporate any salvage value that may be realized with the sale of hazardous wastes, or non-hazardous wastes if permitted by the Agency pursuant to Section 724.213(d), facility structures or equipment, land or other assets associated with the facility at the time of partial or final closure. hazardous wastes that might have economic value.
  - 4) The owner or operator must not incorporate a zero cost for hazardous wastes, or non-hazardous wastes if permitted by the Agency pursuant to Section 724.213(d), that might have economic value.
- b) During the active life of the facility, the owner or operator must adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instruments used to comply with Section 724.243. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Agency as specified in Section 724.243(f)(3). The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an

3698 inflation factor derived from the annual Implicit Price Deflator for Gross National  
 3699 Product (Deflator) as published by the U.S. Department of Commerce in its  
 3700 Survey of Current Business, as specified in subsections (b)(1) and (b)(2) of this  
 3701 Section. The inflation factor is the result of dividing the latest published annual  
 3702 Deflator by the Deflator for the previous year.

- 3703
- 3704 1) The first adjustment is made by multiplying the closure cost estimate by  
 3705 the inflation factor. The result is the adjusted closure cost estimate.
- 3706
- 3707 2) Subsequent adjustments are made by multiplying the latest adjusted  
 3708 closure cost estimate by the latest inflation factor.
- 3709

3710 BOARD NOTE: The table of Deflators is available as Table 1.1.9, "Implicit  
 3711 Price Deflators for Gross Domestic Product," in the National Income and Product  
 3712 Account Tables, published by U.S. Department of Commerce, Bureau of  
 3713 Economic Analysis, National Economic Accounts, available on-line at the  
 3714 following web address: [www.bea.gov/national/nipaweb/Table](http://www.bea.gov/national/nipaweb/TableView.asp?SelectedTable=13&FirstYear=2002&LastYear=2004&Freq=Qtr)  
 3715 View.asp?SelectedTable=13&FirstYear=2002&LastYear=2004&Freq=Qtr.

3716

- 3717 c) During the active life of the facility the owner or operator must revise the closure  
 3718 cost estimate no later than 30 days after the Agency has approved the request to  
 3719 modify the closure plan, if the change in the closure plan increases the cost of  
 3720 closure. The revised closure cost estimate must be adjusted for inflation, as  
 3721 specified in subsection Section 724.242(b).
- 3722
- 3723 d) The owner or operator must keep the following at the facility during the operating  
 3724 life of the facility: the latest closure cost estimate prepared in accordance with  
 3725 subsections Sections 724.242(a) and (c) and, when this estimate has been adjusted  
 3726 in accordance with subsection Section 724.242(b), the latest adjusted closure cost  
 3727 estimate.
- 3728

3729 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

3730

3731 **Section 724.243 Financial Assurance for Closure**

3732

3733 An owner or operator of each facility must establish financial assurance for closure of the  
 3734 facility. The owner or operator must choose from the options that are specified in subsections (a)  
 3735 through (f) of this Section.

3736

- 3737 a) Closure trust fund.
- 3738
- 3739 1) An owner or operator may satisfy the requirements of this Section by  
 3740 establishing a closure trust fund that conforms to the requirements of this

3741 subsection (a) and submitting an original signed duplicate of the trust  
 3742 agreement to the Agency. An owner or operator of a new facility must  
 3743 submit the original signed duplicate of the trust agreement to the Agency  
 3744 at least 60 days before the date on which hazardous waste is first received  
 3745 for treatment, storage or disposal. The trustee must be an entity that has  
 3746 the authority to act as a trustee and whose trust operations are regulated  
 3747 and examined by a federal or State agency.  
 3748

3749 2) The wording of the trust agreement must be that specified in Section  
 3750 724.251, and the trust agreement must be accompanied by a formal  
 3751 certification of acknowledgment, as specified in Section 724.251.  
 3752 Schedule A of the trust agreement must be updated within 60 days after a  
 3753 change in the amount of the current closure cost estimate covered by the  
 3754 agreement.  
 3755

3756 3) Payments into the trust fund must be made annually by the owner or  
 3757 operator over the term of the initial RCRA permit or over the remaining  
 3758 operating life of the facility as estimated in the closure plan, whichever  
 3759 period is shorter; this period is hereafter referred to as the "pay-in period".  
 3760 The payments into the closure trust fund must be made as follows:  
 3761

3762 A) For a new facility, the first payment must be made before the  
 3763 initial receipt of hazardous waste for treatment, storage, or  
 3764 disposal. A receipt from the trustee for this payment must be  
 3765 submitted by the owner or operator to the Agency before this  
 3766 initial receipt of hazardous waste. The first payment must be at  
 3767 least equal to the current closure cost estimate, except as provided  
 3768 in subsection (g) of this Section, divided by the number of years in  
 3769 the pay-in period. Subsequent payments must be made no later  
 3770 than 30 days after each anniversary date of the first payment. The  
 3771 amount of each subsequent payment must be determined by the  
 3772 following formula:  
 3773

$$3774 \text{ Next Payment} = \frac{(CE - CV)}{Y}$$

3775 Where:

- 3776 CE = the current closure cost estimate
- CV = the current value of the trust fund
- Y = the number of years remaining in the pay-in period

3777 B) If an owner or operator establishes a trust fund as specified in 35  
 3778 Ill. Adm. Code 725.243(a) and the value of that trust fund is less  
 3779

3780 than the current closure cost estimate when a permit is awarded for  
 3781 the facility, the amount of the current closure cost estimate still to  
 3782 be paid into the trust fund must be paid in over the pay-in period as  
 3783 defined in subsection (a)(3) ~~of this Section~~. Payments must  
 3784 continue to be made no later than 30 days after each anniversary  
 3785 date of the first payment made pursuant to 35 Ill. Adm. Code 725.  
 3786 The amount of each payment must be determined by the following  
 3787 formula:  
 3788

$$\text{Next Payment} = \frac{(CE - CV)}{Y}$$

3790  
 3791 Where:  
 3792

- CE = the current closure cost estimate
- CV = the current value of the trust fund
- Y = the number of years remaining in the pay-in period

- 3793  
 3794  
 3795 4) The owner or operator may accelerate payments into the trust fund or may  
 3796 deposit the full amount of the current closure cost estimate at the time the  
 3797 fund is established. However, the owner or operator must maintain the  
 3798 value of the fund at no less than the value that the fund would have if  
 3799 annual payments were made as specified in subsection (a)(3) ~~of this~~  
 3800 ~~Section~~.  
 3801  
 3802 5) If the owner or operator establishes a closure trust fund after having used  
 3803 one or more alternate mechanisms specified in this Section or in 35 Ill.  
 3804 Adm. Code 725.243, its first payment must be in at least the amount that  
 3805 the fund would contain if the trust fund were established initially and  
 3806 annual payments made according to specifications of this subsection (a)  
 3807 and 35 Ill. Adm. Code 725.243, as applicable.  
 3808  
 3809 6) After the pay-in period is completed, whenever the current closure cost  
 3810 estimate changes, the owner or operator must compare the new estimate  
 3811 with the trustee's most recent annual valuation of the trust fund. If the  
 3812 value of the fund is less than the amount of the new estimate, the owner or  
 3813 operator, within 60 days after the change in the cost estimate, must either  
 3814 deposit an amount into the fund so that its value after this deposit at least  
 3815 equals the amount of the current closure cost estimate or obtain other  
 3816 financial assurance as specified in this Section to cover the difference.  
 3817  
 3818 7) If the value of the trust fund is greater than the total amount of the current

- 3819 closure cost estimate, the owner or operator may submit a written request  
3820 to the Agency for release of the amount in excess of the current closure  
3821 cost estimate.  
3822
- 3823 8) If an owner or operator substitutes other financial assurance, as specified  
3824 in this Section for all or part of the trust fund, it may submit a written  
3825 request to the Agency for release of the amount in excess of the current  
3826 closure cost estimate covered by the trust fund.  
3827
- 3828 9) Within 60 days after receiving a request from the owner or operator for  
3829 release of funds as specified in subsection (a)(7) or (a)(8) ~~of this Section~~,  
3830 the Agency must instruct the trustee to release to the owner or operator  
3831 such funds as the Agency specifies in writing.  
3832
- 3833 10) After beginning partial or final closure, an owner or operator or another  
3834 person authorized to conduct partial or final closure may request  
3835 reimbursement for closure expenditures by submitting itemized bills to the  
3836 Agency. The owner or operator may request reimbursement for partial  
3837 closure only if sufficient funds are remaining in the trust fund to cover the  
3838 maximum costs of closing the facility over its remaining operating life.  
3839 Within 60 days after receiving bills for partial or final closure activities,  
3840 the Agency must instruct the trustee to make reimbursement in those  
3841 amounts as the Agency specifies in writing if the Agency determines that  
3842 the partial or final closure expenditures are in accordance with the  
3843 approved closure plan, or otherwise justified. If the Agency determines  
3844 that the maximum cost of closure over the remaining life of the facility  
3845 will be significantly greater than the value of the trust fund, it must  
3846 withhold reimbursement of such amounts as it deems prudent until it  
3847 determines, in accordance with subsection (i) ~~of this Section~~, that the  
3848 owner or operator is no longer required to maintain financial assurance for  
3849 final closure of the facility. If the Agency does not instruct the trustee to  
3850 make such reimbursements, the Agency must provide the owner or  
3851 operator with a detailed written statement of reasons.  
3852
- 3853 11) The Agency must agree to termination of the trust when either of the  
3854 following occurs:  
3855
- 3856 A) An owner or operator substitutes alternate financial assurance, as  
3857 specified in this Section; or  
3858
- 3859 B) The Agency releases the owner or operator from the requirements  
3860 of this Section in accordance with subsection (i).  
3861

3862  
3863  
3864  
3865  
3866  
3867  
3868  
3869  
3870  
3871  
3872  
3873  
3874  
3875  
3876  
3877  
3878  
3879  
3880  
3881  
3882  
3883  
3884  
3885  
3886  
3887  
3888  
3889  
3890  
3891  
3892  
3893  
3894  
3895  
3896  
3897  
3898  
3899  
3900  
3901  
3902  
3903  
3904

- 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 the 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 (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.

- 3905  
3906  
3907  
3908  
3909  
3910  
3911  
3912  
3913  
3914  
3915  
3916  
3917  
3918  
3919  
3920  
3921  
3922  
3923  
3924  
3925  
3926  
3927  
3928  
3929  
3930  
3931  
3932  
3933  
3934  
3935  
3936  
3937  
3938  
3939  
3940  
3941  
3942  
3943  
3944  
3945  
3946  
3947
- 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 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 the 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;

- 3991                                   iii)     Annual valuations, as required by the trust agreement; and  
3992  
3993                                   iv)     Notices of nonpayment, as required by the trust agreement.  
3994  
3995                                   4)     The bond must guarantee that the owner or operator will do the following:  
3996  
3997                                   A)     Perform final closure in accordance with the closure plan and other  
3998                                   requirements of the permit for the facility whenever required to do  
3999                                   so; or  
4000  
4001                                   B)     Provide alternative financial assurance, as specified in this Section,  
4002                                   and obtain the Agency's written approval of the assurance  
4003                                   provided, within 90 days after receipt by both the owner or  
4004                                   operator and the Agency of a notice of cancellation of the bond  
4005                                   from the surety.  
4006  
4007                                   5)     Under the terms of the bond, the surety will become liable on the bond  
4008                                   obligation when the owner or operator fails to perform as guaranteed by  
4009                                   the bond. Following a final judicial determination or Board order finding  
4010                                   that the owner or operator has failed to perform final closure in accordance  
4011                                   with the approved closure plan and other permit requirements when  
4012                                   required to do so, under the terms of the bond the surety will perform final  
4013                                   closure, as guaranteed by the bond, or will deposit the amount of the penal  
4014                                   sum into the standby trust fund.  
4015  
4016                                   6)     The penal sum of the bond must be in an amount at least equal to the  
4017                                   current closure cost estimate.  
4018  
4019                                   7)     Whenever the current closure cost estimate increases to an amount greater  
4020                                   than the penal sum, the owner or operator, within 60 days after the  
4021                                   increase, must either cause the penal sum to be increased to an amount at  
4022                                   least equal to the current closure cost estimate and submit evidence of  
4023                                   such increase to the Agency or obtain other financial assurance as  
4024                                   specified in this Section. Whenever the current closure cost estimate  
4025                                   decreases, the penal sum may be reduced to the amount of the current  
4026                                   closure cost estimate following written approval by the Agency.  
4027  
4028                                   8)     Under the terms of the bond, the surety may cancel the bond by sending  
4029                                   notice of cancellation by certified mail to the owner or operator and to the  
4030                                   Agency. Cancellation may not occur, however, during the 120 days  
4031                                   beginning on the date of receipt of the notice of cancellation by both the  
4032                                   owner or operator and the Agency, as evidenced by the return receipts.  
4033

- 4034  
4035  
4036  
4037  
4038  
4039  
4040  
4041  
4042  
4043  
4044  
4045  
4046  
4047  
4048  
4049  
4050  
4051  
4052  
4053  
4054  
4055  
4056  
4057  
4058  
4059  
4060  
4061  
4062  
4063  
4064  
4065  
4066  
4067  
4068  
4069  
4070  
4071  
4072  
4073  
4074  
4075  
4076
- 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

4077 requirements of this Section, the following are not required by  
4078 these regulations.

- 4079
- 4080 i) Payments into the trust fund, as specified in subsection (a)  
4081 of this Section;
- 4082
- 4083 ii) Updating of Schedule A of the trust agreement (as specified  
4084 in Section 724.251) to show current closure cost estimates;
- 4085
- 4086 iii) Annual valuations, as required by the trust agreement; and
- 4087
- 4088 iv) Notices of nonpayment, as required by the trust agreement.
- 4089

- 4090 4) The letter or credit must be accompanied by a letter from the owner or  
4091 operator referring to the letter of credit by number, issuing institution, and  
4092 date and providing the following information: the USEPA identification  
4093 number, name and address of the facility, and the amount of funds assured  
4094 for closure of the facility by the letter of credit.
- 4095
- 4096 5) The letter of credit must be irrevocable and issued for a period of at least  
4097 one year. The letter of credit must provide that the expiration date will be  
4098 automatically extended for a period of at least one year unless, at least 120  
4099 days before the current expiration date, the issuing institution notifies both  
4100 the owner or operator and the Agency by certified mail of a decision not to  
4101 extend the expiration date. Under the terms of the letter of credit, the 120  
4102 days will begin on the date when both the owner or operator and the  
4103 Agency have received the notice, as evidenced by the return receipts.
- 4104
- 4105 6) The letter of credit must be issued in an amount at least equal to the  
4106 current closure cost estimate, except as provided in subsection (g) of this  
4107 Section.
- 4108
- 4109 7) Whenever the current closure cost estimate increases to an amount greater  
4110 than the amount of the credit, the owner or operator, within 60 days after  
4111 the increase, must either cause the amount of the credit to be increased so  
4112 that it at least equals the current closure cost estimate and submit evidence  
4113 of such increase to the Agency, or obtain other financial assurance, as  
4114 specified in this Section, to cover the increase. Whenever the current  
4115 closure cost estimate decreases, the amount of the credit may be reduced  
4116 to the amount of the current closure cost estimate following written  
4117 approval by the Agency.
- 4118
- 4119 8) Following a final judicial determination or Board order finding that the

4120 owner or operator has failed to perform final closure in accordance with  
 4121 the closure plan and other permit requirements when required to do so, the  
 4122 Agency may draw on the letter of credit.  
 4123

4124 9) If the owner or operator does not establish alternative financial assurance,  
 4125 as specified in this Section, and obtain written approval of such alternative  
 4126 assurance from the Agency within 90 days after receipt by both the owner  
 4127 or operator and the Agency of a notice from issuing institution that it has  
 4128 decided not to extend the letter of credit beyond the current expiration  
 4129 date, the Agency must draw on the letter of credit. The Agency may delay  
 4130 the drawing if the issuing institution grants an extension of the term of the  
 4131 credit. During the last 30 days of any such extension the Agency must  
 4132 draw on the letter of credit if the owner or operator has failed to provide  
 4133 alternative financial assurance, as specified in this Section, and obtain  
 4134 written approval of such assurance from the Agency.  
 4135

4136 10) The Agency must return the letter of credit to the issuing institution for  
 4137 termination when either of the following occurs:  
 4138

4139 A) An owner or operator substitutes alternative financial assurance, as  
 4140 specified in this Section; or  
 4141

4142 B) The Agency releases the owner or operator from the requirements  
 4143 of this Section in accordance with subsection (i) ~~of this Section~~.  
 4144

4145 e) Closure insurance.  
 4146

4147 1) An owner or operator may satisfy the requirements of this Section by  
 4148 obtaining closure insurance that conforms to the requirements of this  
 4149 subsection (e) and submitting a certificate of such insurance to the  
 4150 Agency. An owner or operator of a new facility must submit the  
 4151 certificate of insurance to the Agency at least 60 days before the date on  
 4152 which hazardous waste is first received for treatment, storage, or disposal.  
 4153 The insurance must be effective before this initial receipt of hazardous  
 4154 waste. At a minimum, the insurer must be licensed to transact the  
 4155 business of insurance or be eligible to provide insurance as an excess or  
 4156 surplus lines insurer in one or more States.  
 4157

4158 2) The wording of the certificate of insurance must be that specified in  
 4159 Section 724.251.  
 4160

4161 3) The closure insurance policy must be issued for a face amount at least  
 4162 equal to the current closure cost estimate, except as provided in subsection

- 4163 (g) of this Section. The term "face amount" means the total amount the  
 4164 insurer is obligated to pay under the policy. Actual payments by the  
 4165 insurer will not change the face amount, although the insurer's future  
 4166 liability will be lowered by the amount of the payments.  
 4167
- 4168 4) The closure insurance policy must guarantee that funds will be available to  
 4169 close the facility whenever final closure occurs. The policy must also  
 4170 guarantee that, once final closure begins, the insurer will be responsible  
 4171 for paying out funds, up to an amount equal to the face amount of the  
 4172 policy, upon the direction of the Agency to such party or parties, as the  
 4173 Agency specifies.  
 4174
- 4175 5) After beginning partial or final closure, an owner or operator or any other  
 4176 person authorized to conduct closure may request reimbursement for  
 4177 closure expenditures by submitting itemized bills to the Agency. The  
 4178 owner or operator may request reimbursements for partial closure only if  
 4179 the remaining value of the policy is sufficient to cover the maximum costs  
 4180 of closing the facility over its remaining operating life. Within 60 days  
 4181 after receiving bills for closure activities, the Agency must instruct the  
 4182 insurer to make reimbursement in such amounts, as the Agency specifies  
 4183 in writing, if the Agency determines that the partial or final closure  
 4184 expenditures are in accordance with the approved closure plan or  
 4185 otherwise justified. If the Agency determines that the maximum cost of  
 4186 closure over the remaining life of the facility will be significantly greater  
 4187 than the face amount of the policy, it must withhold reimbursement of  
 4188 such amounts that it deems prudent, until it determines, in accordance with  
 4189 subsection (i) of this Section, that the owner or operator is no longer  
 4190 required to maintain financial assurance for closure of the facility. If the  
 4191 Agency does not instruct the insurer to make such reimbursements, the  
 4192 Agency must provide the owner or operator with a detailed written  
 4193 statement of reasons.  
 4194
- 4195 6) The owner or operator must maintain the policy in full force and effect  
 4196 until the Agency consents to termination of the policy by the owner or  
 4197 operator, as specified in subsection (e)(10) of this Section. Failure to pay  
 4198 the premium, without substitution of alternative financial assurance, as  
 4199 specified in this Section, will constitute a significant violation of these  
 4200 regulations, warranting such remedy as the Board may impose pursuant to  
 4201 the Environmental Protection Act. Such violation will be deemed to begin  
 4202 upon receipt by the Agency of a notice of future cancellation, termination  
 4203 or failure to renew due to nonpayment of the premium, rather than upon  
 4204 the date of expiration.  
 4205

- 4206  
4207  
4208  
4209  
4210  
4211  
4212  
4213  
4214  
4215  
4216  
4217  
4218  
4219  
4220  
4221  
4222  
4223  
4224  
4225  
4226  
4227  
4228  
4229  
4230  
4231  
4232  
4233  
4234  
4235  
4236  
4237  
4238  
4239  
4240  
4241  
4242  
4243  
4244  
4245  
4246  
4247  
4248
- 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:

- 4249                   A)    An owner or operator substitutes alternative financial assurance, as  
 4250                   specified in this Section; or  
 4251
- 4252                   B)    The Agency releases the owner or operator from the requirements  
 4253                   of this Section in accordance with subsection (i) ~~of this Section~~.  
 4254
- 4255    f)    Financial test and corporate guarantee for closure.  
 4256
- 4257                   1)    An owner or operator may satisfy the requirements of this Section by  
 4258                   demonstrating that it passes a financial test, as specified in this subsection  
 4259                   (f). To pass this test the owner or operator must meet the criteria of either  
 4260                   subsection (f)(1)(A) or (f)(1)(B) ~~of this Section~~:  
 4261
- 4262                   A)    The owner or operator must have the following:  
 4263
- 4264                            i)    Two of the following three ratios: a ratio of total liabilities  
 4265                            to net worth less than 2.0; a ratio of the sum of net income  
 4266                            plus depreciation, depletion and amortization to total  
 4267                            liabilities greater than 0.1; and a ratio of current assets to  
 4268                            current liabilities greater than 1.5;  
 4269
- 4270                            ii)   Net working capital and tangible net worth each at least six  
 4271                            times the sum of the current closure and post-closure cost  
 4272                            estimates; and the current plugging and abandonment cost  
 4273                            estimates;  
 4274
- 4275                            iii)   Tangible net worth of at least \$10 million; and  
 4276
- 4277                            iv)   Assets located in the United States amounting to at least 90  
 4278                            percent of total assets or at least six times the sum of the  
 4279                            current closure and post-closure cost estimates and the  
 4280                            current plugging and abandonment cost estimates.  
 4281
- 4282                   B)    The owner or operator must have the following:  
 4283
- 4284                            i)    A current rating for its most recent bond issuance of AAA,  
 4285                            AA, A, or BBB as issued by Standard and Poor's or Aaa,  
 4286                            Aa, A, or Baa as issued by Moody's;  
 4287
- 4288                            ii)   Tangible net worth at least six times the sum of the current  
 4289                            closure and post-closure cost estimates and the current  
 4290                            plugging and abandonment cost estimates;  
 4291

- 4292  
4293  
4294  
4295  
4296  
4297  
4298  
4299  
4300  
4301  
4302  
4303  
4304  
4305  
4306  
4307  
4308  
4309  
4310  
4311  
4312  
4313  
4314  
4315  
4316  
4317  
4318  
4319  
4320  
4321  
4322  
4323  
4324  
4325  
4326  
4327  
4328  
4329  
4330  
4331  
4332  
4333  
4334
- 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

- 4335 disposal.
- 4336
- 4337 5) After the initial submission of items specified in subsection (f)(3) of this
- 4338 Section, the owner or operator must send updated information to the
- 4339 Agency within 90 days after the close of each succeeding fiscal year. This
- 4340 information must consist of all three items specified in subsection (f)(3) of
- 4341 this Section.
- 4342
- 4343 6) If the owner or operator no longer meets the requirements of subsection
- 4344 (f)(1) of this Section the owner or operator must send notice to the Agency
- 4345 of intent to establish alternative financial assurance, as specified in this
- 4346 Section. The notice must be sent by certified mail within 90 days after the
- 4347 end of the fiscal year for which the year-end financial data show that the
- 4348 owner or operator no longer meets the requirements. The owner or
- 4349 operator must provide the alternative financial assurance within 120 days
- 4350 after the end of such fiscal year.
- 4351
- 4352 7) The Agency may, based on a reasonable belief that the owner or operator
- 4353 may no longer meet the requirements of subsection (f)(1) of this Section,
- 4354 require reports of financial condition at any time from the owner or
- 4355 operator in addition to those specified in subsection (f)(3) of this Section.
- 4356 If the Agency finds, on the basis of such reports or other information, that
- 4357 the owner or operator no longer meets the requirements of subsection
- 4358 (f)(1) of this Section, the owner or operator must provide alternative
- 4359 financial assurance, as specified in this Section, within 30 days after
- 4360 notification of such a finding.
- 4361
- 4362 8) The Agency may disallow use of this test on the basis of qualifications in
- 4363 the opinion expressed by the independent certified public accountant in the
- 4364 accountant's report on examination of the owner's or operator's financial
- 4365 statements (see subsection (f)(3)(B) of this Section). An adverse opinion
- 4366 or a disclaimer of opinion will be cause for disallowance. The Agency
- 4367 must evaluate other qualifications on an individual basis. The owner or
- 4368 operator must provide alternative financial assurance, as specified in this
- 4369 Section, within 30 days after notification of the disallowance.
- 4370
- 4371 9) The owner or operator is no longer required to submit the items specified
- 4372 in subsection (f)(3) of this Section when either of the following occurs:
- 4373
- 4374 A) An owner or operator substitutes alternative financial assurance, as
- 4375 specified in this Section; or
- 4376
- 4377 B) The Agency releases the owner or operator from the requirements

of this Section in accordance with subsection (i) ~~of this Section.~~

- 4378  
4379  
4380  
4381  
4382  
4383  
4384  
4385  
4386  
4387  
4388  
4389  
4390  
4391  
4392  
4393  
4394  
4395  
4396  
4397  
4398  
4399  
4400  
4401  
4402  
4403  
4404  
4405  
4406  
4407  
4408  
4409  
4410  
4411  
4412  
4413  
4414  
4415  
4416  
4417  
4418  
4419  
4420
- 10) 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)(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.

- 4421
- 4422 g) Use of multiple financial mechanisms. An owner or operator may satisfy the
- 4423 requirements of this Section by establishing more than one financial mechanism
- 4424 per facility. These mechanisms are limited to trust funds, surety bonds
- 4425 guaranteeing payment into a trust fund, letters of credit, and insurance. The
- 4426 mechanisms must be as specified in subsections (a), (b), (d), and (e) of this
- 4427 Section, respectively, except that it is the combination of mechanisms, rather than
- 4428 the single mechanism, that must provide financial assurance for an amount at least
- 4429 equal to the current closure cost estimate. If an owner or operator uses a trust
- 4430 fund in combination with a surety bond or a letter of credit, it may use the trust
- 4431 fund as the standby trust fund for the other mechanisms. A single standby trust
- 4432 fund may be established for two or more mechanisms. The Agency may use any
- 4433 or all of the mechanisms to provide for closure of the facility.
- 4434
- 4435 h) Use of a financial mechanism for multiple facilities. An owner or operator may
- 4436 use a financial assurance mechanism specified in this Section to meet the
- 4437 requirements of this Section for more than one facility. Evidence of financial
- 4438 assurance submitted to the Agency must include a list showing, for each facility,
- 4439 the USEPA identification number, name, address, and the amount of funds for
- 4440 closure assured by the mechanism. The amount of funds available through the
- 4441 mechanism must be no less than the sum of funds that would be available if a
- 4442 separate mechanism had been established and maintained for each facility. The
- 4443 amount of funds available to the Agency must be sufficient to close all of the
- 4444 owner or operator's facilities. In directing funds available through the mechanism
- 4445 for closure of any of the facilities covered by the mechanism, the Agency may
- 4446 direct only the amount of funds designated for that facility, unless the owner or
- 4447 operator agrees to the use of additional funds available under the mechanism.
- 4448
- 4449 i) Release of the owner or operator from the requirements of this Section. Within
- 4450 60 days after receiving certifications from the owner or operator and a qualified
- 4451 Professional Engineer that final approved closure has been accomplished in
- 4452 accordance with the closure plan, the Agency must notify the owner or operator in
- 4453 writing that it is no longer required by this Section to maintain financial assurance
- 4454 for closure of the facility, unless the Agency determines that closure has not been
- 4455 in accordance with the approved closure plan. The Agency must provide the
- 4456 owner or operator a detailed written statement of any such determination that
- 4457 closure has not been in accordance with the approved closure plan.
- 4458
- 4459 j) Appeal. The following Agency actions are deemed to be permit modifications or
- 4460 refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code
- 4461 702.184(e)(3)):
- 4462
- 4463 1) An increase in, or a refusal to decrease the amount of, a bond, letter of

4464 credit, or insurance;

4465  
4466 2) Requiring alternative assurance upon a finding that an owner or operator  
4467 or parent corporation no longer meets a financial test.

4468  
4469 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
4470

4471 **Section 724.245 Financial Assurance for Post-Closure Care**  
4472

4473 An owner or operator of a hazardous waste management unit subject to the requirements of  
4474 Section 724.244 must establish financial assurance for post-closure care in accordance with the  
4475 approved post-closure plan for the facility 60 days prior to the initial receipt of hazardous waste  
4476 or the effective date of the regulation, whichever is later. The owner or operator must choose  
4477 from among the following options:

4478  
4479 a) Post-Closure Trust Fund.  
4480

4481 1) An owner or operator may satisfy the requirements of this Section by  
4482 establishing a post-closure trust fund that conforms to the requirements of  
4483 this subsection (a) and submitting an original, signed duplicate of the trust  
4484 agreement to the Agency. An owner or operator of a new facility must  
4485 submit the original, signed duplicate of the trust agreement to the Agency  
4486 at least 60 days before the date on which hazardous waste is first received  
4487 for disposal. The trustee must be an entity that has the authority to act as a  
4488 trustee and whose trust operations are regulated and examined by a federal  
4489 or State agency.

4490  
4491 2) The wording of the trust agreement must be that specified in Section  
4492 724.251 and the trust agreement accompanied by a formal certification of  
4493 acknowledgment (as specified in Section 724.251). Schedule A of the trust  
4494 agreement must be updated within 60 days after a change in the amount of  
4495 the current post-closure cost estimate covered by the agreement.

4496  
4497 3) Payments into the trust fund must be made annually by the owner or  
4498 operator over the term of the initial RCRA permit or over the remaining  
4499 operating life of the facility as estimated in the closure plan, whichever  
4500 period is shorter; this period is hereafter referred to as the "pay-in period."  
4501 The payments into the post-closure trust fund must be made as follows:

4502  
4503 A) For a new facility, the first payment must be made before the  
4504 initial receipt of hazardous waste for disposal. A receipt from the  
4505 trustee for this payment must be submitted by the owner or  
4506 operator to the Agency before this initial receipt of hazardous

4507 waste. The first payment must be at least equal to the current post-  
 4508 closure cost estimate, except as provided in subsection (g), divided  
 4509 by the number of years in the pay-in period. Subsequent payments  
 4510 must be made no later than 30 days after each anniversary date of  
 4511 the first payment. The amount of each subsequent payment must  
 4512 be determined by the following formula:  
 4513

$$\text{Next Payment} = \frac{(CE - CV)}{Y}$$

4514  
 4515 Where:

- 4516 CE = the current closure cost estimate
- 4517 CV = the current value of the trust fund
- Y = the number of years remaining in the pay-in period

4518  
 4519 B) If an owner or operator establishes a trust fund, as specified in 35  
 4520 Ill. Adm. Code 725.245(a), and the value of that trust fund is less  
 4521 than the current post-closure cost estimate when a permit is  
 4522 awarded for the facility, the amount of the current post-closure cost  
 4523 estimate still to be paid into the trust fund must be paid in over the  
 4524 pay-in period as defined in subsection (a)(3). Payments must  
 4525 continue to be made no later than 30 days after each anniversary  
 4526 date of the first payment made pursuant to 35 Ill. Adm. Code 725.  
 4527 The amount of each payment must be determined by the following  
 4528 formula:  
 4529

$$\text{Next Payment} = \frac{(CE - CV)}{Y}$$

4530  
 4531 Where:

- 4532 CE = the current closure cost estimate
- 4533 CV = the current value of the trust fund
- Y = the number of years remaining in the pay-in period

4534  
 4535 4) The owner or operator may accelerate payments into the trust fund or may  
 4536 deposit the full amount of the current post-closure cost estimate at the time  
 4537 the fund is established. However, the owner or operator must maintain the  
 4538 value of the fund at no less than the value that the fund would have if  
 4539 annual payments were made as specified in subsection (a)(3).  
 4540

4541 5) If the owner or operator establishes a post-closure trust fund after having

- 4542 used one or more alternative mechanisms specified in this Section or in 35  
 4543 Ill. Adm. Code 725.245, its first payment must be in at least the amount  
 4544 that the fund would contain if the trust fund were established initially and  
 4545 annual payments made according to specifications of this subsection (a)  
 4546 and 35 Ill. Adm. Code 725.245, as applicable.  
 4547
- 4548 6) After the pay-in period is completed, whenever the current post-closure  
 4549 cost estimate changes during the operating life of the facility, the owner or  
 4550 operator must compare the new estimate with the trustee's most recent  
 4551 annual valuation of the trust fund. If the value of the fund is less than the  
 4552 amount of the new estimate, the owner or operator, within 60 days after  
 4553 the change in the cost estimate, must either deposit an amount into the  
 4554 fund so that its value after this deposit at least equals the amount of the  
 4555 current post-closure cost estimate, or obtain other financial assurance, as  
 4556 specified in this Section, to cover the difference.  
 4557
- 4558 7) During the operating life of the facility, if the value of the trust fund is  
 4559 greater than the total amount of the current post-closure cost estimate, the  
 4560 owner or operator may submit a written request to the Agency for release  
 4561 of the amount in excess of the current post-closure cost estimate.  
 4562
- 4563 8) If an owner or operator substitutes other financial assurance as specified in  
 4564 this Section for all or part of the trust fund, it may submit a written request  
 4565 to the Agency for release of the amount in excess of the current post-  
 4566 closure cost estimate covered by the trust fund.  
 4567
- 4568 9) Within 60 days after receiving a request from the owner or operator for  
 4569 release of funds, as specified in subsection (a)(7) or (a)(8), the Agency  
 4570 must instruct the trustee to release to the owner or operator such funds as  
 4571 the Agency specifies in writing.  
 4572
- 4573 10) During the period of post-closure care, the Agency must approve a release  
 4574 of funds if the owner or operator demonstrates to the Agency that the  
 4575 value of the trust fund exceeds the remaining cost of post-closure care.  
 4576
- 4577 11) An owner or operator or any other person authorized to perform post-  
 4578 closure care may request reimbursement for post-closure care expenditures  
 4579 by submitting itemized bills to the Agency. Within 60 days after receiving  
 4580 bills for post-closure activities, the Agency must instruct the trustee to  
 4581 make requirements in those amounts that the Agency specifies in writing  
 4582 if the Agency determines that the post-closure care expenditures are in  
 4583 accordance with the approved post-closure plan or otherwise justified. If  
 4584 the Agency does not instruct the trustee to make such reimbursements, the

- 4585 Agency must provide the owner or operator with a detailed written  
4586 statement of reasons.  
4587
- 4588 12) The Agency must agree to termination of the trust when either of the  
4589 following occurs:  
4590
- 4591 A) An owner or operator substitutes alternative financial assurance, as  
4592 specified in this Section; or  
4593
- 4594 B) The Agency releases the owner or operator from the requirements  
4595 of this Section in accordance with subsection (i).  
4596
- 4597 b) Surety Bond Guaranteeing Payment into a Post-Closure Trust Fund.  
4598
- 4599 1) An owner or operator may satisfy the requirements of this Section by  
4600 obtaining a surety bond that conforms to the requirements of this  
4601 subsection (b) and submitting the bond to the Agency. An owner or  
4602 operator of a new facility must submit the bond to the Agency at least 60  
4603 days before the date on which hazardous waste is first received for  
4604 disposal. The bond must be effective before this initial receipt of  
4605 hazardous waste. The surety company issuing the bond must, at a  
4606 minimum, be among those listed as acceptable sureties on federal bonds in  
4607 Circular 570 of the U.S. Department of the Treasury.  
4608
- 4609 BOARD NOTE: The U.S. Department of the Treasury updates Circular  
4610 570, "Companies Holding Certificates of Authority as Acceptable Sureties  
4611 on Federal Bonds and as Acceptable Reinsuring Companies;" on an  
4612 annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the  
4613 Internet from the following website: <http://www.fms.treas.gov/c570/>.  
4614
- 4615 2) The wording of the surety bond must be that specified in Section 724.251.  
4616
- 4617 3) The owner or operator who uses a surety bond to satisfy the requirements  
4618 of this Section must also establish a standby trust fund. Under the terms  
4619 of the bond, all payments made thereunder will be deposited by the surety  
4620 directly into the standby trust fund in accordance with instructions from  
4621 the Agency. This standby trust fund must meet the requirements specified  
4622 in subsection (a), except as follows:  
4623
- 4624 A) An original, signed duplicate of the trust agreement must be  
4625 submitted to the Agency with the surety bond; and  
4626
- 4627 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);
- 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).
- 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

- 4671 amount of the current post-closure cost estimate following written  
4672 approval by the Agency.  
4673
- 4674 8) Under the terms of the bond, the surety may cancel the bond by sending  
4675 notice of cancellation by certified mail to the owner or operator and to the  
4676 Agency. Cancellation may not occur, however, during the 120 days  
4677 beginning on the date of receipt of the notice of cancellation by both the  
4678 owner or operator and the Agency, as evidence by the return receipts.  
4679
- 4680 9) The owner or operator may cancel the bond if the Agency has given prior  
4681 written consent based on its receipt of evidence of alternative financial  
4682 assurance, as specified in this Section.  
4683
- 4684 c) Surety Bond Guaranteeing Performance of Post-Closure Care.  
4685
- 4686 1) An owner or operator may satisfy the requirements of this Section by  
4687 obtaining a surety bond that conforms to the requirements of this  
4688 subsection (c) and submitting the bond to the Agency. An owner or  
4689 operator of a new facility must submit the bond to the Agency at least 60  
4690 days before the date on which hazardous waste is first received for  
4691 disposal. The bond must be effective before this initial receipt of  
4692 hazardous waste. The surety company issuing the bond must, at a  
4693 minimum, be among those listed as acceptable sureties on federal bonds in  
4694 Circular 570 of the U.S. Department of the Treasury.  
4695
- 4696 BOARD NOTE: The U.S. Department of the Treasury updates Circular  
4697 570, "Companies Holding Certificates of Authority as Acceptable Sureties  
4698 on Federal Bonds and as Acceptable Reinsuring Companies," on an  
4699 annual basis pursuant to 31 CFR 223.16. Circular 570 is available on the  
4700 Internet from the following website: <http://www.fms.treas.gov/c570/>.  
4701
- 4702 2) The wording of the surety bond must be that specified in Section 724.251.  
4703
- 4704 3) The owner or operator who uses a surety bond to satisfy the requirements  
4705 of this Section must also establish a standby trust fund. Under the terms  
4706 of the bond, all payments made thereunder will be deposited by the surety  
4707 directly into the standby trust fund in accordance with instructions from  
4708 the Agency. This standby trust must meet the requirements specified in  
4709 subsection (a), except as follows:  
4710
- 4711 A) An original, signed duplicate of the trust agreement must be  
4712 submitted to the Agency with the surety bond; and  
4713

- 4714  
4715  
4716  
4717  
4718  
4719  
4720  
4721  
4722  
4723  
4724  
4725  
4726  
4727  
4728  
4729  
4730  
4731  
4732  
4733  
4734  
4735  
4736  
4737  
4738  
4739  
4740  
4741  
4742  
4743  
4744  
4745  
4746  
4747  
4748  
4749  
4750  
4751  
4752  
4753  
4754  
4755  
4756
- 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);
    - 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,

- 4757 or obtain other financial assurance, as specified in this Section. Whenever  
4758 the current closure cost estimate decreases during the operating life of the  
4759 facility, the penal sum may be reduced to the amount of the current post-  
4760 closure cost estimate following written approval by the Agency.  
4761
- 4762 8) During the period of post-closure care, the Agency must approve a  
4763 decrease in the penal sum if the owner or operator demonstrates to the  
4764 Agency that the amount exceeds the remaining cost of post-closure care.  
4765
- 4766 9) Under the terms of the bond, the surety may cancel the bond by sending  
4767 notice of cancellation by certified mail to the owner or operator and to the  
4768 Agency. Cancellation may not occur, however, during the 120 days  
4769 beginning on the date of receipt of the notice of cancellation by both the  
4770 owner or operator and the Agency, as evidenced by the return receipts.  
4771
- 4772 10) The owner or operator may cancel the bond if the Agency has given prior  
4773 written consent. The Agency must provide such written consent when  
4774 either of the following occurs:  
4775
- 4776 A) An owner or operator substitutes alternative financial assurance as  
4777 specified in this Section; or  
4778
- 4779 B) The Agency releases the owner or operator from the requirements  
4780 of this Section in accordance with subsection (i).  
4781
- 4782 11) The surety will not be liable for deficiencies in the performance of post-  
4783 closure care by the owner or operator after the Agency releases the owner  
4784 or operator from the requirements of this Section in accordance with  
4785 subsection (i).  
4786
- 4787 d) Post-Closure Letter of Credit.  
4788
- 4789 1) An owner or operator may satisfy the requirements of this Section by  
4790 obtaining an irrevocable standby letter of credit that conforms to the  
4791 requirements of this subsection (d) and submitting the letter to the Agency.  
4792 An owner or operator of a new facility must submit the letter of credit to  
4793 the Agency at least 60 days before the date on which hazardous waste is  
4794 first received for disposal. The letter of credit must be effective before  
4795 this initial receipt of hazardous waste. The issuing institution must be an  
4796 entity that has the authority to issue letters of credit and whose letter-of-  
4797 credit operations are regulated and examined by a federal or State agency.  
4798
- 4799 2) The wording of the letter of credit must be that specified in Section

- 4800 724.251.  
 4801  
 4802 3) An owner or operator who uses a letter of credit to satisfy the  
 4803 requirements of this Section must also establish a standby trust fund.  
 4804 Under the terms of the letter of credit, all amounts paid pursuant to a draft  
 4805 by the Agency must be deposited by the issuing institution directly into the  
 4806 standby trust fund in accordance with instructions from the Agency. This  
 4807 standby trust fund must meet the requirements of the trust fund specified  
 4808 in subsection (a), except as follows:  
 4809  
 4810 A) An original, signed duplicate of the trust agreement must be  
 4811 submitted to the Agency with the letter of credit; and  
 4812  
 4813 B) Unless the standby trust fund is funded pursuant to the  
 4814 requirements of this Section, the following are not required by  
 4815 these regulations:  
 4816  
 4817 i) Payments into the trust fund, as specified in subsection (a);  
 4818  
 4819 ii) Updating of Schedule A of the trust agreement (as specified  
 4820 in Section 724.251) to show current post-closure cost  
 4821 estimates;  
 4822  
 4823 iii) Annual valuations, as required by the trust agreement; and  
 4824  
 4825 iv) Notices of nonpayment, as required by the trust agreement.  
 4826  
 4827 4) The letter or credit must be accompanied by a letter from the owner or  
 4828 operator referring to the letter of credit by number, issuing institution, and  
 4829 date and providing the following information: the USEPA identification  
 4830 number, name and address of the facility, and the amount of funds assured  
 4831 for post-closure care of the facility by the letter of credit.  
 4832  
 4833 5) The letter of credit must be irrevocable and issued for a period of at least  
 4834 one year. The letter of credit must provide that the expiration date will be  
 4835 automatically extended for a period of at least one year unless, at least 120  
 4836 days before the current expiration date, the issuing institution notifies both  
 4837 the owner or operator and the Agency by certified mail of a decision not to  
 4838 extend the expiration date. Under the terms of the letter of credit, the 120  
 4839 days will begin on the date when both the owner or operator and the  
 4840 Agency have received the notice, as evidenced by the return receipts.  
 4841  
 4842 6) The letter of credit must be issued in an amount at least equal to the

- 4843 current post-closure cost estimate, except as provided in subsection (g).  
 4844  
 4845 7) Whenever the current post-closure cost estimate increases to an amount  
 4846 greater than the amount of the credit during the operating life of the  
 4847 facility, the owner or operator, within 60 days after the increase, must  
 4848 either cause the amount of the credit to be increased so that it at least  
 4849 equals the current post-closure cost estimate and submit evidence of such  
 4850 increase to the Agency, or obtain other financial assurance as specified in  
 4851 this Section to cover the increase. Whenever the current post-closure cost  
 4852 estimate decreases during the operating life of the facility, the amount of  
 4853 the credit may be reduced to the amount of the current post-closure cost  
 4854 estimate following written approval by the Agency.  
 4855  
 4856 8) During the period of post-closure care, the Agency must approve a  
 4857 decrease in the amount of the letter of credit if the owner or operator  
 4858 demonstrates to the Agency that the amount exceeds the remaining cost of  
 4859 post-closure care.  
 4860  
 4861 9) Following a final judicial determination or Board order finding that the  
 4862 owner or operator has failed to perform post-closure care in accordance  
 4863 with the approved post-closure plan and other permit requirements, the  
 4864 Agency may draw on the letter of credit.  
 4865  
 4866 10) If the owner or operator does not establish alternative financial assurance,  
 4867 as specified in this Section, and obtain written approval of such alternative  
 4868 assurance from the Agency within 90 days after receipt by both the owner  
 4869 or operator and the Agency of a notice from the issuing institution that it  
 4870 has decided not to extend the letter of credit beyond the current expiration  
 4871 date, the Agency must draw on the letter of credit. The Agency may delay  
 4872 the drawing if the issuing institution grants an extension of the term of the  
 4873 credit. During the last 30 days of any such extension the Agency must  
 4874 draw on the letter of credit if the owner or operator has failed to provide  
 4875 alternative financial assurance, as specified in this Section, and obtain  
 4876 written approval of such assurance from the Agency.  
 4877  
 4878 11) The Agency must return the letter of credit to the issuing institution for  
 4879 termination when either of the following occurs:  
 4880  
 4881 A) An owner or operator substitutes alternative financial assurance, as  
 4882 specified in this Section; or  
 4883  
 4884 B) The Agency releases the owner or operator from the requirements  
 4885 of this Section in accordance with subsection (i).

- 4886  
 4887 e) Post-Closure Insurance.  
 4888  
 4889 1) An owner or operator may satisfy the requirements of this Section by  
 4890 obtaining post-closure insurance that conforms to the requirements of this  
 4891 subsection (e) and submitting a certificate of such insurance to the  
 4892 Agency. An owner or operator of a new facility must submit the  
 4893 certificate of insurance to the Agency at least 60 days before the date on  
 4894 which hazardous waste is first received for disposal. The insurance must  
 4895 be effective before this initial receipt of hazardous waste. At a minimum,  
 4896 the insurer must be licensed to transact the business of insurance or be  
 4897 eligible to provide insurance as an excess or surplus lines insurer in one or  
 4898 more states.  
 4899  
 4900 2) The wording of the certificate of insurance must be that specified in  
 4901 Section 724.251.  
 4902  
 4903 3) The post-closure insurance policy must be issued for a face amount at least  
 4904 equal to the current post-closure cost estimate, except as provided in  
 4905 subsection (g). The term "face amount" means the total amount the  
 4906 insurer is obligated to pay under the policy. Actual payments by the  
 4907 insurer will not change the face amount, although the insurer's future  
 4908 liability will be lowered by the amount of the payments.  
 4909  
 4910 4) The post-closure insurance policy must guarantee that funds will be  
 4911 available to provide post-closure care of facility whenever the post-closure  
 4912 period begins. The policy must also guarantee that, once post-closure care  
 4913 begins, the insurer will be responsible for paying out funds, up to an  
 4914 amount equal to the face amount of the policy, upon the direction of the  
 4915 Agency to such party or parties as the Agency specifies.  
 4916  
 4917 5) An owner or operator or any other person authorized to perform post-  
 4918 closure care may request reimbursement for post-closure care expenditures  
 4919 by submitting itemized bills to the Agency. Within 60 days after receiving  
 4920 bills for post-closure activities, the Agency must instruct the insurer to  
 4921 make reimbursement in such amounts as the Agency specifies in writing if  
 4922 the Agency determines that the post-closure care expenditures are in  
 4923 accordance with the approved post-closure plan or otherwise justified. If  
 4924 the Agency does not instruct the insurer to make such reimbursements, the  
 4925 Agency must provide the owner or operator with a detailed written  
 4926 statement of reasons.  
 4927  
 4928 6) The owner or operator must maintain the policy in full force and effect

- 4929 until the Agency consents to termination of the policy by the owner or  
 4930 operator as specified in subsection (e)(11). Failure to pay the premium,  
 4931 without substitution of alternative financial assurance as specified in this  
 4932 Section, will constitute a significant violation of these regulations,  
 4933 warranting such remedy as the Board may impose pursuant to the  
 4934 Environmental Protection Act [~~415 ILCS 5~~]. Such violation will be  
 4935 deemed to begin upon receipt by the Agency of a notice of future  
 4936 cancellation, termination, or failure to renew due to nonpayment of the  
 4937 premium, rather than upon the date of expiration.  
 4938
- 4939 7) Each policy must contain a provision allowing assignment of the policy to  
 4940 a successor owner or operator. Such assignment may be conditional upon  
 4941 consent of the insurer, provided such consent is not unreasonably refused.  
 4942
- 4943 8) The policy must provide that the insurer may not cancel, terminate, or fail  
 4944 to renew the policy except for failure to pay the premium. The automatic  
 4945 renewal of the policy must, at a minimum, provide the insured with the  
 4946 option of renewal at the face amount of the expiring policy. If there is a  
 4947 failure to pay the premium, the insurer may elect to cancel, terminate, or  
 4948 fail to renew the policy by sending notice by certified mail to the owner or  
 4949 operator and the Agency. Cancellation, termination, or failure to renew  
 4950 may not occur, however, during the 120 days beginning with the date of  
 4951 receipt of the notice by both the Agency and the owner or operator, as  
 4952 evidenced by the return receipts. Cancellation, termination, or failure to  
 4953 renew may not occur, and the policy will remain in full force and effect, in  
 4954 the event that on or before the date of expiration one of the following  
 4955 occurs:
- 4956
- 4957 A) The Agency deems the facility abandoned;
  - 4958
  - 4959 B) The permit is terminated or revoked or a new permit is denied;
  - 4960
  - 4961 C) Closure is ordered by the Board or a U.S. district court or other
  - 4962 court of competent jurisdiction;
  - 4963
  - 4964 D) The owner or operator is named as debtor in a voluntary or
  - 4965 involuntary proceeding under 11 USC (Bankruptcy); or
  - 4966
  - 4967 E) The premium due is paid.
  - 4968
- 4969 9) Whenever the current post-closure cost estimate increases to an amount  
 4970 greater than the face amount of the policy during the life of the facility, the  
 4971 owner or operator, within 60 days after the increase, must either cause the

- 4972 face amount to be increased to an amount at least equal to the current post-  
 4973 closure cost estimate and submit evidence of such increase to the Agency  
 4974 or obtain other financial assurance, as specified in this Section, to cover  
 4975 the increase. Whenever the current post-closure cost estimate decreases  
 4976 during the operating life of the facility, the face amount may be reduced to  
 4977 the amount of the current post-closure cost estimate following written  
 4978 approval by the Agency.  
 4979
- 4980 10) Commencing on the date that liability to make payments pursuant to the  
 4981 policy accrues, the insurer must thereafter annually increase the face  
 4982 amount of the policy. Such increase must be equivalent to the face  
 4983 amount of the policy, less any payments made, multiplied by an amount  
 4984 equivalent to 85 percent of the most recent investment rate or of the  
 4985 equivalent coupon-issue yield announced by the U.S. Treasury for 26-  
 4986 week Treasury securities.  
 4987
- 4988 11) The Agency must give written consent to the owner or operator that the  
 4989 owner or operator may terminate the insurance policy when either of the  
 4990 following occurs:  
 4991
- 4992 A) An owner or operator substitutes alternative financial assurance, as  
 4993 specified in this Section; or  
 4994
- 4995 B) The Agency releases the owner or operator from the requirements  
 4996 of this Section in accordance with subsection (i).  
 4997
- 4998 f) Financial Test and Corporate Guarantee for Post-Closure Care.  
 4999
- 5000 1) An owner or operator may satisfy the requirements of this Section by  
 5001 demonstrating that it passes a financial test as specified in this subsection  
 5002 (f). To pass this test the owner or operator must meet the criteria of either  
 5003 subsection (f)(1)(A) or (f)(1)(B):  
 5004
- 5005 A) The owner or operator must have the following:  
 5006
- 5007 i) Two of the following three ratios: a ratio of total liabilities  
 5008 to net worth less than 2.0; a ratio of the sum of net income  
 5009 plus depreciation, depletion and amortization to total  
 5010 liabilities greater than 0.1; and a ratio of current assets to  
 5011 current liabilities greater than 1.5;  
 5012
- 5013 ii) Net working capital and tangible net worth each at least six  
 5014 times the sum of the current closure and post-closure cost

- 5015 estimates and the current plugging and abandonment cost  
5016 estimates;
- 5017
- 5018 iii) Tangible net worth of at least \$10 million; and
- 5019
- 5020 iv) Assets in the United States amounting to at least 90 percent  
5021 of its total assets or at least six times the sum of the current  
5022 closure and post-closure cost estimates and the current  
5023 plugging and abandonment cost estimates.
- 5024
- 5025 B) The owner or operator must have the following:
- 5026
- 5027 i) A current rating for its most recent bond issuance of AAA,  
5028 AA, A, or BBB as issued by Standard and Poor's or Aaa,  
5029 Aa, A, or Baa as issued by Moody's;
- 5030
- 5031 ii) Tangible net worth at least six times the sum of the current  
5032 closure and post-closure cost estimates and current  
5033 plugging and abandonment cost estimates;
- 5034
- 5035 iii) Tangible net worth of at least \$10 million; and
- 5036
- 5037 iv) Assets located in the United States amounting to at least 90  
5038 percent of its total assets or at least six times the sum of the  
5039 current closure and post-closure cost estimates and the  
5040 current plugging and abandonment cost estimates.
- 5041
- 5042 2) The phrase "current closure and post-closure cost estimates," as used in  
5043 subsection (f)(1), refers to the cost estimates required to be shown in  
5044 subsections 1 through 4 of the letter from the owner's or operator's chief  
5045 financial officer (see Section 724.251). The phrase "current plugging and  
5046 abandonment cost estimates," as used in subsection (f)(1), refers to the  
5047 cost estimates required to be shown in subsections 1 through 4 of the letter  
5048 from the owner's or operator's chief financial officer (see 35 Ill. Adm.  
5049 Code 704.240).
- 5050
- 5051 3) To demonstrate that it meets this test, the owner or operator must submit  
5052 the following items to the Agency:
- 5053
- 5054 A) A letter signed by the owner's or operator's chief financial officer  
5055 and worded as specified in Section 724.251;
- 5056
- 5057 B) A copy of the independent certified public accountant's report on

5058 examination of the owner's or operator's financial statements for  
5059 the latest completed fiscal year; and

- 5060
- 5061 C) A special report from the owner's or operator's independent  
5062 certified public accountant to the owner or operator stating the  
5063 following:
- 5064
- 5065 i) The accountant has compared the data that the letter from  
5066 the chief financial officer specifies as having been derived  
5067 from the independently audited, year-end financial  
5068 statements for the latest fiscal year with the amounts in  
5069 such financial statements; and
- 5070
- 5071 ii) In connection with that procedure, no matters came to the  
5072 accountant's attention that caused the accountant to believe  
5073 that the specified data should be adjusted.
- 5074
- 5075 4) An owner or operator of a new facility must submit the items specified in  
5076 subsection (f)(3) to the Agency at least 60 days before the date on which  
5077 hazardous waste is first received for disposal.
- 5078
- 5079 5) After the initial submission of items specified in subsection (f)(3), the  
5080 owner or operator must send updated information to the Agency within 90  
5081 days after the close of each succeeding fiscal year. This information must  
5082 consist of all three items specified in subsection (f)(3).
- 5083
- 5084 6) If the owner or operator no longer meets the requirements of subsection  
5085 (f)(1), the owner or operator must send notice to the Agency of intent to  
5086 establish alternative financial assurance, as specified in this Section. The  
5087 notice must be sent by certified mail within 90 days after the end of the  
5088 fiscal year for which the year-end financial data show that the owner or  
5089 operator no longer meets the requirements the owner or operator must  
5090 provide the alternative financial assurance within 120 days after the end of  
5091 such fiscal year.
- 5092
- 5093 7) Based on a reasonable belief that the owner or operator may no longer  
5094 meet the requirements of subsection (f)(1), the Agency may require  
5095 reports of financial condition at any time from the owner or operator in  
5096 addition to those specified in subsection (f)(3). If the Agency finds, on the  
5097 basis of such reports or other information, that the owner or operator no  
5098 longer meets the requirements of subsection (f)(1), the owner or operator  
5099 must provide alternative financial assurance, as specified in this Section,  
5100 within 30 days after notification of such a finding.

- 5101  
 5102  
 5103  
 5104  
 5105  
 5106  
 5107  
 5108  
 5109  
 5110  
 5111  
 5112  
 5113  
 5114  
 5115  
 5116  
 5117  
 5118  
 5119  
 5120  
 5121  
 5122  
 5123  
 5124  
 5125  
 5126  
 5127  
 5128  
 5129  
 5130  
 5131  
 5132  
 5133  
 5134  
 5135  
 5136  
 5137  
 5138  
 5139  
 5140  
 5141  
 5142  
 5143
- 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)). 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) 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).
  
  - 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). 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

5144 guarantee must provide as follows:

5145  
 5146 A) That if the owner or operator fails to perform post-closure care of a  
 5147 facility covered by the corporate guarantee in accordance with the  
 5148 post-closure plan and other permit requirements whenever required  
 5149 to do so, the guarantor will do so or establish a trust fund as  
 5150 specified in subsection (a) in the name of the owner or operator.

5151  
 5152 B) That the corporate guarantee will remain in force unless the  
 5153 guarantor sends notice of cancellation by certified mail to the  
 5154 owner or operator and to the Agency. Cancellation may not occur,  
 5155 however, during the 120 days beginning on the date of receipt of  
 5156 the notice of cancellation by both the owner or operator and the  
 5157 Agency, as evidenced by the return receipts.

5158  
 5159 C) That if the owner or operator fails to provide alternative financial  
 5160 assurance as specified in this Section and obtain the written  
 5161 approval of such alternative assurance from the Agency within 90  
 5162 days after receipt by both the owner or operator and the Agency of  
 5163 a notice of cancellation of the corporate guarantee from the  
 5164 guarantor, the guarantor will provide such alternative financial  
 5165 assurance in the name of the owner or operator.

5166  
 5167 g) Use of Multiple Financial Mechanisms. An owner or operator may satisfy the  
 5168 requirements of this Section by establishing more than one financial mechanism  
 5169 per facility. These mechanisms are limited to trust funds, surety bonds  
 5170 guaranteeing payment into a trust fund, letters of credit and insurance. The  
 5171 mechanisms must be as specified in subsections (a), (b), (d), and (e), respectively,  
 5172 except that it is the combination of mechanisms, rather than the single  
 5173 mechanism, that must provide financial assurance for an amount at least equal to  
 5174 the current post-closure cost estimate. If an owner or operator uses a trust fund in  
 5175 combination with a surety bond or a letter of credit, it may use the trust fund as  
 5176 the standby trust fund for the other mechanisms. A single standby trust fund may  
 5177 be established for two or more mechanisms. The Agency may use any or all of  
 5178 the mechanisms to provide for post-closure care of the facility.

5179  
 5180 h) Use of a Financial Mechanism for Multiple Facilities. An owner or operator may  
 5181 use a financial assurance mechanism specified in this Section to meet the  
 5182 requirements of this Section for more than one facility. Evidence of financial  
 5183 assurance submitted to the Agency must include a list showing, for each facility,  
 5184 the USEPA identification number, name, address, and the amount of funds for  
 5185 post-closure care assured by the mechanism. The amount of funds available  
 5186 through the mechanism must be no less than the sum of funds that would be

5187 available if a separate mechanism had been established and maintained for each  
 5188 facility. The amount of funds available to the Agency must be sufficient to close  
 5189 all of the owner or operator's facilities. In directing funds available through the  
 5190 mechanism for post-closure care of any of the facilities covered by the  
 5191 mechanism, the Agency may direct only the amount of funds designated for that  
 5192 facility, unless the owner or operator agrees to the use of additional funds  
 5193 available under the mechanism.  
 5194

5195 i) Release of the Owner or Operator from the Requirements of this Section. Within  
 5196 60 days after receiving certifications from the owner or operator and a qualified  
 5197 Professional Engineer that the post-closure care period has been completed for a  
 5198 hazardous waste disposal unit in accordance with the approved plan, the Agency  
 5199 must notify the owner or operator that it is no longer required to maintain  
 5200 financial assurance for post-closure care of that unit, unless the Agency  
 5201 determines that post-closure care has not been in accordance with the approved  
 5202 post-closure plan. The Agency must provide the owner or operator a detailed  
 5203 written statement of any such determination that post-closure care has not been in  
 5204 accordance with the approved post-closure plan.  
 5205

5206 j) Appeal. The following Agency actions are deemed to be permit modifications or  
 5207 refusals to modify for purposes of appeal to the Board (35 Ill. Adm. Code  
 5208 702.184(e)(3)):  
 5209

- 5210 1) An increase in or a refusal to decrease the amount of a bond, letter of  
 5211 credit, or insurance;
- 5212
- 5213 2) Requiring alternative assurance upon a finding that an owner or operator  
 5214 or parent corporation no longer meets a financial test.  
 5215

5216 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 5217

5218 **Section 724.247 Liability Requirements**  
 5219

5220 a) Coverage for ~~Sudden Accidental Occurrences~~sudden-accidental-occurrences. An  
 5221 owner or operator of a hazardous waste treatment, storage, or disposal facility, or  
 5222 a group of such facilities, must demonstrate financial responsibility for bodily  
 5223 injury and property damage to third parties caused by sudden accidental  
 5224 occurrences arising from operations of the facility or group of facilities. The  
 5225 owner or operator must have and maintain liability coverage for sudden accidental  
 5226 occurrences in the amount of at least \$1 million per occurrence with an annual  
 5227 aggregate of at least \$2 million, exclusive of legal defense costs. This liability  
 5228 coverage may be demonstrated as specified in subsections (a)(1), (a)(2), (a)(3),  
 5229 (a)(4), (a)(5), or (a)(6) of this Section:

- 5230  
 5231  
 5232  
 5233  
 5234  
 5235  
 5236  
 5237  
 5238  
 5239  
 5240  
 5241  
 5242  
 5243  
 5244  
 5245  
 5246  
 5247  
 5248  
 5249  
 5250  
 5251  
 5252  
 5253  
 5254  
 5255  
 5256  
 5257  
 5258  
 5259  
 5260  
 5261  
 5262  
 5263  
 5264  
 5265  
 5266  
 5267  
 5268  
 5269  
 5270  
 5271  
 5272
- 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 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

5273 the owner or operator is not consolidated with the financial statement of  
5274 the guarantor. The amounts of coverage demonstrated must total at least  
5275 the minimum amounts required by this Section. If the owner or operator  
5276 demonstrates the required coverage through the use of a combination of  
5277 financial assurances pursuant to this subsection (a), the owner or operator  
5278 must specify at least one such assurance as "primary" coverage and must  
5279 specify other such assurance as "excess" coverage.  
5280

- 5281 7) An owner or operator must notify the Agency within 30 days whenever  
5282 any of the following occurs:  
5283
- 5284 A) A claim results in a reduction in the amount of financial assurance  
5285 for liability coverage provided by a financial instrument authorized  
5286 in subsections (a)(1) through (a)(6) ~~of this Section~~;
  - 5287
  - 5288 B) A Certification of Valid Claim for bodily injury or property  
5289 damages caused by sudden or non-sudden accidental occurrence  
5290 arising from the operation of a hazardous waste treatment, storage,  
5291 or disposal facility is entered between the owner or operator and  
5292 third-party claimant for liability coverage pursuant to subsections  
5293 (a)(1) through (a)(6) ~~of this Section~~; or  
5294
  - 5295 C) A final court order establishing a judgement for bodily injury or  
5296 property damage caused by a sudden or non-sudden accidental  
5297 occurrence arising from the operation of a hazardous waste  
5298 treatment, storage, or disposal facility is issued against the owner  
5299 or operator or an instrument that is providing financial assurance  
5300 for liability coverage pursuant to subsections (a)(1) through (a)(6)  
5301 ~~of this Section~~.  
5302
- 5303 b) Coverage for Nonsudden Accidental Occurrences ~~nonsudden accidental~~  
5304 ~~occurrences~~. An owner or operator of a surface impoundment, landfill, land  
5305 treatment facility, or disposal miscellaneous unit that is used to manage hazardous  
5306 waste, or a group of such facilities, must demonstrate financial responsibility for  
5307 bodily injury and property damage to third parties caused by nonsudden  
5308 accidental occurrences arising from operations of the facility or group of facilities.  
5309 The owner or operator must have and maintain liability coverage for nonsudden  
5310 accidental occurrences in the amount of at least \$3 million per occurrence with an  
5311 annual aggregate of at least \$6 million, exclusive of legal defense costs. An  
5312 owner or operator meeting the requirements of this Section may combine the  
5313 required per-occurrence coverage levels for sudden and nonsudden accidental  
5314 occurrences into a single per-occurrence level, and combine the required annual  
5315 aggregate coverage levels for sudden and nonsudden accidental occurrences into a

5316 single annual aggregate level. Owners or operators who combine coverage levels  
5317 for sudden and nonsudden accidental occurrences must maintain liability  
5318 coverage in the amount of at least \$4 million per occurrence and \$8 million  
5319 annual aggregate. This liability coverage may be demonstrated as specified in  
5320 subsections (b)(1), (b)(2), (b)(3), (b)(4), (b)(5), or (b)(6) ~~of this Section~~;  
5321

5322 1) An owner or operator may demonstrate the required liability coverage by  
5323 having liability insurance, as specified in this subsection (b).  
5324

5325 A) Each insurance policy must be amended by attachment of the  
5326 Hazardous Waste Facility Liability Endorsement or evidenced by a  
5327 Certificate of Liability Insurance. The wording of the endorsement  
5328 must be that specified in Section 724.251. The wording of the  
5329 certificate of insurance must be that specified in Section 724.251.  
5330 The owner or operator must submit a signed duplicate original of  
5331 the endorsement or the certificate of insurance to the Agency. If  
5332 requested by the Agency, the owner or operator must provide a  
5333 signed duplicate original of the insurance policy. An owner or  
5334 operator of a new facility must submit the signed duplicate original  
5335 of the Hazardous Waste Facility Liability Endorsement or the  
5336 Certificate of Liability Insurance to the Agency at least 60 days  
5337 before the date on which hazardous waste is first received for  
5338 treatment, storage, or disposal. The insurance must be effective  
5339 before this initial receipt of hazardous waste.  
5340

5341 B) Each insurance policy must be issued by an insurer that is licensed  
5342 by the Illinois Department of Insurance.  
5343

5344 2) An owner or operator may meet the requirements of this Section by  
5345 passing a financial test or using the guarantee for liability coverage, as  
5346 specified in subsections (f) and (g) ~~of this Section~~.  
5347

5348 3) An owner or operator may meet the requirements of this Section by  
5349 obtaining a letter of credit for liability coverage, as specified in subsection  
5350 (h) ~~of this Section~~.  
5351

5352 4) An owner or operator may meet the requirements of this Section by  
5353 obtaining a surety bond for liability coverage, as specified in subsection (i)  
5354 ~~of this Section~~.  
5355

5356 5) An owner or operator may meet the requirements of this Section by  
5357 obtaining a trust fund for liability coverage, as specified in subsection (j)  
5358 ~~of this Section~~.

5359  
 5360  
 5361  
 5362  
 5363  
 5364  
 5365  
 5366  
 5367  
 5368  
 5369  
 5370  
 5371  
 5372  
 5373  
 5374  
 5375  
 5376  
 5377  
 5378  
 5379  
 5380  
 5381  
 5382  
 5383  
 5384  
 5385  
 5386  
 5387  
 5388  
 5389  
 5390  
 5391  
 5392  
 5393  
 5394  
 5395  
 5396  
 5397  
 5398  
 5399  
 5400  
 5401

- 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~~.
  
- c) Request for ~~Adjusted Level~~ adjusted level of ~~Required Liability Coverage~~ 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

5402 the Agency as part of the application pursuant to 35 Ill. Adm. Code 703.182 for a  
 5403 facility that does not have a permit, or pursuant to the procedures for permit  
 5404 modification pursuant to 35 Ill. Adm. Code 705.128 for a facility that has a  
 5405 permit. If granted, the modification will take the form of an adjusted level of  
 5406 required liability coverage, such level to be based on the Agency assessment of  
 5407 the degree and duration of risk associated with the ownership or operation of the  
 5408 facility or group of facilities. The Agency may require an owner or operator who  
 5409 requests an adjusted level of required liability coverage to provide such technical  
 5410 and engineering information as is necessary to determine a level of financial  
 5411 responsibility other than that required by subsection (a) or (b) ~~of this Section~~.  
 5412 Any request for an adjusted level of required liability coverage for a permitted  
 5413 facility will be treated as a request for a permit modification pursuant to 35 Ill.  
 5414 Adm. Code 703.271(e)(3) and 705.128.

5415  
 5416 d) Adjustments by the Agency. If the Agency determines that the levels of financial  
 5417 responsibility required by subsection (a) or (b) ~~of this Section~~ are not consistent  
 5418 with the degree and duration of risk associated with treatment, storage, or disposal  
 5419 at the facility or group of facilities, the Agency must adjust the level of financial  
 5420 responsibility required pursuant to subsection (a) or (b) ~~of this Section~~ as may be  
 5421 necessary to adequately protect human health and the environment. This adjusted  
 5422 level must be based on the Agency's assessment of the degree and duration of risk  
 5423 associated with the ownership or operation of the facility or group of facilities. In  
 5424 addition, if the Agency determines that there is a significant risk to human health  
 5425 and the environment from nonsudden accidental occurrences resulting from the  
 5426 operations of a facility that is not a surface impoundment, landfill, or land  
 5427 treatment facility, the Agency may require that an owner or operator of the facility  
 5428 comply with subsection (b) ~~of this Section~~. An owner or operator must furnish to  
 5429 the Agency, within a time specified by the Agency in the request, which must be  
 5430 not be less than 30 days, any information that the Agency requests to determine  
 5431 whether cause exists for such adjustments of level or type of coverage. Any  
 5432 adjustment of the level or type of coverage for a facility that has a permit will be  
 5433 treated as a permit modification pursuant to 35 Ill. Adm. Code 703.271(e)(3) and  
 5434 705.128.

5435  
 5436 e) Period of ~~Coverage~~ coverage. Within 60 days after receiving certifications from  
 5437 the owner or operator and a qualified Professional Engineer that final closure has  
 5438 been completed in accordance with the approved closure plan, the Agency must  
 5439 notify the owner or operator in writing that the owner or operator is no longer  
 5440 required by this Section to maintain liability coverage for that facility, unless the  
 5441 Agency determines that closure has not been in accordance with the approved  
 5442 closure plan.

5443  
 5444 f) Financial ~~Test~~test for Liability Coverage ~~liability coverage~~.

5445  
5446  
5447  
5448  
5449  
5450  
5451  
5452  
5453  
5454  
5455  
5456  
5457  
5458  
5459  
5460  
5461  
5462  
5463  
5464  
5465  
5466  
5467  
5468  
5469  
5470  
5471  
5472  
5473  
5474  
5475  
5476  
5477  
5478  
5479  
5480  
5481  
5482  
5483  
5484  
5485  
5486  
5487

- 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

- 5488 and worded as specified in Section 724.251. If an owner or  
 5489 operator is using the financial test to demonstrate both assurance  
 5490 for closure or post-closure care, as specified by Sections  
 5491 724.243(f) and 724.245(f) and 35 Ill. Adm. Code 725.243(e) and  
 5492 725.245(e), and liability coverage, it must submit the letter  
 5493 specified in Section 724.251 to cover both forms of financial  
 5494 responsibility; a separate letter, as specified in Section 724.251, is  
 5495 not required.  
 5496
- 5497 B) A copy of the independent certified public accountant's report on  
 5498 examination of the owner's or operator's financial statements for  
 5499 the latest completed fiscal year.  
 5500
- 5501 C) A special report from the owner's or operator's independent  
 5502 certified public accountant to the owner or operator stating the  
 5503 following:  
 5504
- 5505 i) The accountant has compared the data that the letter from  
 5506 the chief financial officer specifies as having been derived  
 5507 from the independently audited, year-end financial  
 5508 statements for the latest fiscal year with the amounts in  
 5509 such financial statements; and  
 5510
- 5511 ii) In connection with that procedure, no matters came to the  
 5512 accountant's attention that caused the accountant to believe  
 5513 that the specified data should be adjusted.  
 5514
- 5515 4) An owner or operator of a new facility must submit the items specified in  
 5516 subsection (f)(3) ~~of this Section~~ to the Agency at least 60 days before the  
 5517 date on which hazardous waste is first received for treatment, storage, or  
 5518 disposal.  
 5519
- 5520 5) After the initial submission of items specified in subsection (f)(3) ~~of this~~  
 5521 ~~Section~~, the owner or operator must send updated information to the  
 5522 Agency within 90 days after the close of each succeeding fiscal year. This  
 5523 information must consist of all three items specified in subsection (f)(3) ~~of~~  
 5524 ~~this Section~~.  
 5525
- 5526 6) If the owner or operator no longer meets the requirements of subsection  
 5527 (f)(1) ~~of this Section~~, the owner or operator must obtain insurance, a letter  
 5528 of credit, a surety bond, a trust fund, or a guarantee for the entire amount  
 5529 of required liability coverage as specified in this Section. Evidence of  
 5530 insurance must be submitted to the Agency within 90 days after the end of

5531 the fiscal year for which the year-end financial data show that the owner  
5532 or operator no longer meets the test requirements.

5533  
5534 7) The Agency may disallow use of this test on the basis of qualifications in  
5535 the opinion expressed by the independent certified public accountant in the  
5536 accountant's report on examination of the owner's or operator's financial  
5537 statements (see subsection (f)(3)(B) ~~of this Section~~). An adverse opinion  
5538 or a disclaimer of opinion will be cause for disallowance. The Agency  
5539 must evaluate other qualifications on an individual basis. The owner or  
5540 operator must provide evidence of insurance for the entire amount of  
5541 required liability coverage, as specified in this Section, within 30 days  
5542 after notification of disallowance.

5543  
5544 g) Guarantee for Liability Coverage ~~liability coverage~~.

5545  
5546 1) Subject to subsection (g)(2) ~~of this Section~~, an owner or operator may  
5547 meet the requirements of this Section by obtaining a written guarantee,  
5548 referred to as a "guarantee-". The guarantor must be the direct or higher-  
5549 tier parent corporation of the owner or operator, a firm whose parent  
5550 corporation is also the parent corporation of the owner or operator, or a  
5551 firm with a "substantial business relationship" with the owner or operator.  
5552 The guarantor must meet the requirements for owners and operators in  
5553 subsections (f)(1) through (f)(6) ~~of this Section~~. The wording of the  
5554 guarantee must be that specified in Section 724.251. A certified copy of  
5555 the guarantee must accompany the items sent to the Agency, as specified  
5556 in subsection (f)(3) ~~of this Section~~. One of these items must be the letter  
5557 from the guarantor's chief financial officer. If the guarantor's parent  
5558 corporation is also the parent corporation of the owner or operator, this  
5559 letter must describe the value received in consideration of the guarantee.  
5560 If the guarantor is a firm with a "substantial business relationship" with the  
5561 owner or operator, this letter must describe this "substantial business  
5562 relationship" and the value received in consideration of the guarantee.  
5563 The terms of the guarantee must provide for the following:

5564  
5565 A) If the owner or operator fails to satisfy a judgment based on a  
5566 determination of liability for bodily injury or property damage to  
5567 third parties caused by sudden or nonsudden accidental  
5568 occurrences (or both as the case may be) arising from the operation  
5569 of facilities covered by this guarantee, or if the owner or operator  
5570 fails to pay an amount agreed to in settlement of claims arising  
5571 from or alleged to arise from such injury or damage, that the  
5572 guarantor will do so up to the limits of coverage.  
5573

- 5574 B) That the guarantee will remain in force unless the guarantor sends  
5575 notice of cancellation by certified mail to the owner or operator  
5576 and to the Agency. The guarantee must not be terminated unless  
5577 and until the Agency approves alternative liability coverage  
5578 complying with Section 724.247 or 35 Ill. Adm. Code 725.247.  
5579
- 5580 2) The guarantor must execute the guarantee in Illinois. The guarantee must  
5581 be accompanied by a letter signed by the guarantor that states as follows:  
5582
- 5583 A) The guarantee was signed in Illinois by an authorized agent of the  
5584 guarantor;  
5585
- 5586 B) The guarantee is governed by Illinois law; and  
5587
- 5588 C) The name and address of the guarantor's registered agent for  
5589 service of process.  
5590
- 5591 3) The guarantor must have a registered agent pursuant to Section 5.05 of the  
5592 Business Corporation Act of 1983 [805 ILCS 5/5.05] or Section 105.05 of  
5593 the General Not-for-Profit Corporation Act of 1986 [805 ILCS  
5594 105/105.05].  
5595
- 5596 h) Letter of ~~Credite~~redit for ~~Liability Coverage~~liability coverage.  
5597
- 5598 1) An owner or operator may satisfy the requirements of this Section by  
5599 obtaining an irrevocable standby letter of credit that conforms to the  
5600 requirements of this subsection (h), and submitting a copy of the letter of  
5601 credit to the Agency.  
5602
- 5603 2) The financial institution issuing the letter of credit must be an entity that  
5604 has the authority to issue letters of credit and whose letter of credit  
5605 operations are regulated and examined by the Illinois Commissioner of  
5606 Banks and Trust Companies.  
5607
- 5608 3) The wording of the letter of credit must be that specified in Section  
5609 724.251.  
5610
- 5611 4) An owner or operator who uses a letter of credit to satisfy the  
5612 requirements of this Section may also establish a trust fund. Under the  
5613 terms of such a letter of credit, all amounts paid pursuant to a draft by the  
5614 trustee of the standby trust in accordance with instructions from the  
5615 trustee. The trustee of the standby trust fund must be an entity that has the  
5616 authority to act as a trustee and whose trust operations are regulated and

- 5617 examined by the Illinois Commissioner of Banks and Trust Companies, or  
5618 who complies with the Corporate Fiduciary Act [205 ILCS 620].  
5619
- 5620 5) The wording of the standby trust fund must be identical to that specified in  
5621 Section 724.251(n).  
5622
- 5623 i) Surety ~~Bond~~ bond for Liability Coverage ~~liability coverage~~.  
5624
- 5625 1) An owner or operator may satisfy the requirements of this Section by  
5626 obtaining a surety bond that conforms to the requirements of this  
5627 subsection (i) and submitting a copy of the bond to the Agency.  
5628
- 5629 2) The surety company issuing the bond must be licensed by the Illinois  
5630 Department of Insurance.  
5631
- 5632 3) The wording of the surety bond must be that specified in Section 724.251.  
5633
- 5634 j) Trust ~~Fund~~ fund for Liability Coverage ~~liability coverage~~.  
5635
- 5636 1) An owner or operator may satisfy the requirements of this Section by  
5637 establishing a trust fund that conforms to the requirements of this  
5638 subsection (j) and submitting a signed, duplicate original of the trust  
5639 agreement to the Agency.  
5640
- 5641 2) The trustee must be an entity that has the authority to act as a trustee and  
5642 whose trust operations are regulated and examined by the Illinois  
5643 Commissioner of Banks and Trust Companies, or who complies with the  
5644 Corporate Fiduciary Act [205 ILCS 620].  
5645
- 5646 3) The trust fund for liability coverage must be funded for the full amount of  
5647 the liability coverage to be provided by the trust fund before it may be  
5648 relied upon to satisfy the requirements of this Section. If at any time after  
5649 the trust fund is created the amount of funds in the trust fund is reduced  
5650 below the full amount of liability coverage to be provided, the owner or  
5651 operator, by the anniversary of the date of establishment of the fund, must  
5652 either add sufficient funds to the trust fund to cause its value to equal the  
5653 full amount of liability coverage to be provided, or obtain other financial  
5654 assurance as specified in this Section to cover the difference. For purposes  
5655 of this subsection (j), "the full amount of the liability coverage to be  
5656 provided" means the amount of coverage for sudden and non-sudden  
5657 accidental occurrences required to be provided by the owner or operator  
5658 by this Section, less the amount of financial assurance for liability  
5659 coverage that is being provided by other financial assurance mechanisms

5660 being used to demonstrate financial assurance by the owner or operator.

- 5661  
5662 4) The wording of the trust fund must be that specified in Section 724.251.

5663  
5664 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

5665 SUBPART I: USE AND MANAGEMENT OF CONTAINERS

5666 **Section 724.270 Applicability**

5667  
5668 The regulations in this Subpart I apply to the owner or operator of a hazardous waste facility that  
5670 stores ~~containers of hazardous waste~~ in containers, except as Section 724.101 provides  
5671 otherwise.  
5672

5673  
5674 BOARD NOTE: Under Sections 721.107 and 721.133(c), if a hazardous waste is emptied from  
5675 a container the residue remaining in the container is not considered a hazardous waste if the  
5676 container is "empty", as defined in Section 721.107. In that event, management of the container  
5677 is exempt from the requirements of this Subpart I.

5678  
5679 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

5680  
5681 **Section 724.274 Inspections**

5682  
5683 At least weekly, the owner or operator must inspect areas where containers are stored. The  
5684 owner or operator must look for leaking containers and for deterioration of containers and the  
5685 containment system caused by corrosion or other factors. See Sections 724.115(c) and 724.271  
5686 for remedial action required if deterioration or leaks are detected.

5687  
5688 ~~BOARD NOTE: See Sections 724.115(e) and 724.271 for remedial action required if~~  
5689 ~~deterioration or leaks are detected.~~

5690  
5691 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

5692  
5693 **Section 724.275 Containment**

- 5694  
5695 a) Container storage areas must have a containment system that is designed and  
5696 operated in accordance with subsection (b) ~~of this Section~~, except as otherwise  
5697 provided by subsection (c) ~~of this Section~~;

- 5698  
5699 b) A containment system must be designed and operated as follows:

- 5700  
5701 1) A base must underlie the containers that is free of cracks or gaps and is  
5702 sufficiently impervious to contain leaks, spills, and accumulated

5703 precipitation until the collected material is detected and removed.

5704  
5705  
5706  
5707  
5708  
5709  
5710  
5711  
5712  
5713  
5714  
5715  
5716  
5717  
5718  
5719  
5720  
5721  
5722  
5723  
5724  
5725  
5726  
5727  
5728  
5729  
5730  
5731  
5732  
5733  
5734  
5735  
5736  
5737  
5738  
5739  
5740  
5741  
5742  
5743  
5744  
5745

- 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.

5746  
5747  
5748  
5749  
5750  
5751  
5752  
5753  
5754  
5755  
5756  
5757  
5758  
5759  
5760  
5761  
5762  
5763  
5764  
5765  
5766  
5767  
5768  
5769  
5770  
5771  
5772  
5773  
5774  
5775  
5776  
5777  
5778  
5779  
5780  
5781  
5782  
5783  
5784  
5785  
5786  
5787  
5788

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.279 Air Emission Standards**

The owner or operator must manage all hazardous waste placed in a container in accordance with the requirements of Subparts AA, BB, and CC of this Part.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**SUBPART J: TANK SYSTEMS**

**Section 724.290 Applicability**

The requirements of this Subpart J apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in subsection (a), (b), or (c) of this Section or in Section 724.101.

- a) Tank systems that are used to store or treat hazardous waste that contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in Section 724.293. To demonstrate the absence or presence of free liquids in the stored or treated waste, the following test must be used: USEPA 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).
- b) Tank systems, including sumps, are defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 724.293(a).
- c) Tanks, sumps, and other such collection devices or systems used in conjunction with drip pads, as defined in 35 Ill. Adm. Code 720.110 and regulated under Subpart W of this Part, must meet the requirements of this Subpart J.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**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 fit ~~unfit~~ for use. Except as provided in subsection (c) of this Section, the owner or operator must, by January 12, 1988,

5789 obtain and keep on file at the facility a written assessment reviewed and certified  
5790 by a qualified Professional Engineer, in accordance with 35 Ill. Adm. Code  
5791 702.126(d), that attests to the tank system's integrity.  
5792

5793 b) This assessment must determine whether the tank system is adequately designed  
5794 and has sufficient structural strength and compatibility with the wastes to be  
5795 stored or treated, to ensure that it will not collapse, rupture, or fail. At a  
5796 minimum, this assessment must consider the following:  
5797

- 5798 1) Design standards, if available, according to which the tank and ancillary  
5799 equipment were constructed;
- 5800
- 5801 2) Hazardous characteristics of the wastes that have been and will be  
5802 handled;
- 5803
- 5804 3) Existing corrosion protection measures;
- 5805
- 5806 4) Documented age of the tank system, if available (otherwise an estimate of  
5807 the age); and  
5808
- 5809 5) Results of a leak test, internal inspection, or other tank integrity  
5810 examination so that the following is true:  
5811
- 5812 A) For non-enterable underground tanks, the assessment must include  
5813 a leak test that is capable of taking into account the effects of  
5814 temperature variations, tank end deflection, vapor pockets, and  
5815 high water table effects, and  
5816
- 5817 B) For other than non-enterable underground tanks and for ancillary  
5818 equipment, this assessment must include either a leak test, as  
5819 described above, or other integrity examination that is certified by  
5820 a qualified Professional Engineer, in accordance with 35 Ill. Adm.  
5821 Code 702.126(d), that address cracks, leaks, corrosion, and  
5822 erosion.  
5823

5824 BOARD NOTE: The practices described in the American Petroleum  
5825 Institute (API) Publication, "Guide for Inspection of Refinery  
5826 Equipment," Chapter XIII, "Atmospheric and Low-Pressure Storage  
5827 Tanks," incorporated by reference in 35 Ill. Adm. Code 720.111(a), may  
5828 be used, where applicable, as guidelines in conducting other than a leak  
5829 test.  
5830

5831 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 42 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 a qualified 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;

- 5875 iv) Soil resistivity;
- 5876
- 5877 v) Structure to soil potential;
- 5878
- 5879 vi) Influence of nearby underground metal structures (e.g.,
- 5880 piping);
- 5881
- 5882 vii) Existence of stray electric current;
- 5883
- 5884 viii) Existing corrosion-protection measures (e.g., coating,
- 5885 cathodic protection, etc.); and
- 5886
- 5887 B) The type and degree of external corrosion protection that are
- 5888 needed to ensure the integrity of the tank system during the use of
- 5889 the tank system or component, consisting of one or more of the
- 5890 following:
- 5891
- 5892 i) Corrosion-resistant materials of construction, such as
- 5893 special alloys, fiberglass reinforced plastic, etc.;
- 5894
- 5895 ii) Corrosion-resistant coating, such as epoxy, fiberglass, etc.,
- 5896 with cathodic protection (e.g., impressed current or
- 5897 sacrificial anodes); and
- 5898
- 5899 iii) Electrical isolation devices, such as insulating joints,
- 5900 flanges, etc.
- 5901
- 5902 BOARD NOTE: The practices described in the National
- 5903 Association of Corrosion Engineers (NACE) standard, "Control of
- 5904 External Corrosion on Metallic Buried, Partially Buried, or
- 5905 Submerged Liquid Storage Systems," NACE Recommended
- 5906 Practice RP0285, and "Cathodic Protection of Underground
- 5907 Petroleum Storage Tanks and Piping Systems," API
- 5908 Recommended Practice 1632, each incorporated by reference in 35
- 5909 Ill. Adm. Code 720.111(a), may be used, where applicable, as
- 5910 guidelines in providing corrosion protection for tank systems.
- 5911
- 5912 4) For underground tank system components that are likely to be adversely
- 5913 affected by vehicular traffic, a determination of design or operational
- 5914 measures that will protect the tank system against potential damage; and
- 5915
- 5916 5) Design considerations to ensure the following:
- 5917

- 5918 A) That tank foundations will maintain the load of a full tank;  
5919  
5920 B) That tank systems will be anchored to prevent flotation or  
5921 dislodgment where the tank system is placed in a saturated zone, or  
5922 is located within a seismic fault zone subject to the standards of  
5923 Section 724.118(a); and  
5924  
5925 C) That tank systems will withstand the effects of frost heave.  
5926
- b) The owner or operator of a new tank system must ensure that proper handling  
5927 procedures are adhered to in order to prevent damage to the system during  
5928 installation. Prior to covering, enclosing or placing a new tank system or  
5929 component in use, an independent qualified installation inspector or a qualified  
5930 Professional Engineer, either of whom is trained and experienced in the proper  
5931 installation of tank systems or components, must inspect the system for the  
5932 presence of any of the following items:  
5933  
5934
- 1) Weld breaks;  
5935
  - 2) Punctures;  
5936
  - 3) Scrapes of protective coatings;  
5937
  - 4) Cracks;  
5938
  - 5) Corrosion;  
5939
  - 6) Other structural damage or inadequate construction or installation. All  
5940 discrepancies must be remedied before the tank system is covered,  
5941 enclosed, or placed in use.  
5942
- c) New tank systems or components that are placed underground and which are  
5943 backfilled must be provided with a backfill material that is a noncorrosive,  
5944 porous, and homogeneous substance which is installed so that the backfill is  
5945 placed completely around the tank and compacted to ensure that the tank and  
5946 piping are fully and uniformly supported.  
5947
- d) All new tanks and ancillary equipment must be tested for tightness prior to being  
5948 covered, enclosed or placed in use. If a tank system is found not to be tight, all  
5949 repairs necessary to remedy the leaks in the system must be performed prior to the  
5950 tank system being covered, enclosed, or placed into use.  
5951
- e) Ancillary equipment must be supported and protected against physical damage  
5952  
5953  
5954  
5955  
5956  
5957  
5958  
5959  
5960

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 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**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 a tank system that stores or treats materials that become hazardous wastes within two years after the hazardous waste listing, or when the tank system has reached 15 years of age, whichever comes later.

- 6004           b)    Secondary containment systems must fulfill the following:
  - 6005
  - 6006           1)    It must be designed, installed, and operated to prevent any migration of
  - 6007                 wastes or accumulated liquid out of the system to the soil, groundwater, or
  - 6008                 surface water at any time during the use of the tank system; and
  - 6009
  - 6010           2)    It must be capable of detecting and collecting releases and accumulated
  - 6011                 liquids until the collected material is removed.
  - 6012
- 6013           c)    To meet the requirements of subsection (b) ~~of this Section~~, secondary containment
- 6014                 systems must, at a minimum, fulfill the following:
  - 6015
  - 6016           1)    It must be constructed of or lined with materials that are compatible with
  - 6017                 the wastes to be placed in the tank system and must have sufficient
  - 6018                 strength and thickness to prevent failure owing to pressure gradients
  - 6019                 (including static head and external hydrological forces), physical contact
  - 6020                 with the waste to which it is exposed, climatic conditions, and the stress of
  - 6021                 daily operation (including stresses from nearby vehicular traffic);
  - 6022
  - 6023           2)    It must be placed on a foundation or base capable of providing support to
  - 6024                 the secondary containment system, resistance to pressure gradients above
  - 6025                 and below the system, and capable of preventing failure due to settlement,
  - 6026                 compression or uplift;
  - 6027
  - 6028           3)    It must be provided with a leak-detection system that is designed and
  - 6029                 operated so that it will detect the failure of either the primary or secondary
  - 6030                 containment structure or the presence of any release of hazardous waste or
  - 6031                 accumulated liquid in the secondary containment system within 24 hours,
  - 6032                 or at the earliest practicable time if the owner or operator demonstrates, by
  - 6033                 way of permit application, to the Agency that existing detection
  - 6034                 technologies or site conditions will not allow detection of a release within
  - 6035                 24 hours; and
  - 6036
  - 6037           4)    It must be sloped or otherwise designed or operated to drain and remove
  - 6038                 liquids resulting from leaks, spills, or precipitation. Spilled or leaked
  - 6039                 waste and accumulated precipitation must be removed from the secondary
  - 6040                 containment system within 24 hours, or in as timely a manner as is
  - 6041                 possible to prevent harm to human health and the environment, if the
  - 6042                 owner or operator demonstrates to the Agency, by way of permit
  - 6043                 application, that removal of the released waste or accumulated
  - 6044                 precipitation cannot be accomplished within 24 hours.
  - 6045

6046           BOARD NOTE: If the collected material is a hazardous waste under 35

6047 Ill. Adm. Code 721, it is subject to management as a hazardous waste in  
6048 accordance with all applicable requirements of 35 Ill. Adm. Code 722  
6049 through 728. If the collected material is discharged through a point source  
6050 to waters of the State, it is subject to the NPDES permit requirement of  
6051 Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code  
6052 309. If discharged to a Publicly Owned Treatment Work (POTW), it is  
6053 subject to the requirements of 35 Ill. Adm. Code 307 and 310. If the  
6054 collected material is released to the environment, it may be subject to the  
6055 reporting requirements of 35 Ill. Adm. Code 750.410 and federal 40 CFR  
6056 302.6.

6057  
6058 d) Secondary containment for tanks must include one or more of the following  
6059 devices:

- 6060  
6061 1) A liner (external to the tank);  
6062  
6063 2) A vault;  
6064  
6065 3) A double-walled tank; or  
6066  
6067 4) An equivalent device, as approved by the Board in an adjusted standards  
6068 proceeding.

6069  
6070 e) In addition to the requirements of subsections (b), (c), and (d) of this Section,  
6071 secondary containment systems must satisfy the following requirements:

- 6072  
6073 1) An external liner system must fulfill the following:  
6074  
6075 A) It must be designed or operated to contain 100 percent of the  
6076 capacity of the largest tank within its boundary.  
6077  
6078 B) It must be designed or operated to prevent run-on or infiltration of  
6079 precipitation into the secondary containment system, unless the  
6080 collection system has sufficient excess capacity to contain run-on  
6081 or infiltration. Such additional capacity must be sufficient to  
6082 contain precipitation from a 25-year, 24-hour rainfall event.  
6083  
6084 C) It must be free of cracks or gaps.  
6085  
6086 D) It must be designed and installed to surround the tank completely  
6087 and to cover all surrounding earth likely to come into contact with  
6088 the waste if the waste is released from the tanks (i.e., it is capable  
6089 of preventing lateral as well as vertical migration of the waste).

6090  
6091  
6092  
6093  
6094  
6095  
6096  
6097  
6098  
6099  
6100  
6101  
6102  
6103  
6104  
6105  
6106  
6107  
6108  
6109  
6110  
6111  
6112  
6113  
6114  
6115  
6116  
6117  
6118  
6119  
6120  
6121  
6122  
6123  
6124  
6125  
6126  
6127  
6128  
6129  
6130  
6131  
6132

- 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

6133  
6134  
6135  
6136  
6137  
6138  
6139  
6140  
6141  
6142  
6143  
6144  
6145  
6146  
6147  
6148  
6149  
6150  
6151  
6152  
6153  
6154  
6155  
6156  
6157  
6158  
6159  
6160  
6161  
6162  
6163  
6164  
6165  
6166  
6167  
6168  
6169  
6170  
6171  
6172  
6173  
6174  
6175

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

6176 justification in accordance with subsection (g)(2) of this Section.  
6177

6178 1) When determining whether to grant alternative design and operating  
6179 practices based on a demonstration of equivalent protection of  
6180 groundwater and surface water, the Board will consider whether the  
6181 petitioner has justified an adjusted standard based on the following factors:

6182 A) The nature and quantity of the wastes;

6183 B) The proposed alternative design and operation;

6184 C) The hydrogeologic setting of the facility, including the thickness of  
6185 soils present between the tank system and groundwater; and

6186 D) All other factors that would influence the quality and mobility of  
6187 the hazardous constituents and the potential for them to migrate to  
6188 groundwater or surface water.  
6189

6190 2) When determining whether to grant alternative design and operating  
6191 practices based on a demonstration of no substantial present or potential  
6192 hazard, the Board will consider whether the petitioner has justified an  
6193 adjusted standard based on the following factors:

6194 A) The potential adverse effects on groundwater, surface water and  
6195 land quality taking into account, considering the following:

6200 i) The physical and chemical characteristics of the waste in  
6201 the tank system, including its potential for migration;

6202 ii) The hydrogeological characteristics of the facility and  
6203 surrounding land;

6204 iii) The potential for health risk caused by human exposure to  
6205 waste constituents;

6206 iv) The potential for damage to wildlife, crops, vegetation, and  
6207 physical structures caused by exposure to waste  
6208 constituents; and

6209 v) The persistence and permanence of the potential adverse  
6210 effects.  
6211

6212 B) The potential adverse effects of a release on groundwater quality,  
6213  
6214  
6215  
6216  
6217  
6218

- 6219 taking into account;
- 6220
- 6221 i) The quantity and quality of groundwater and the direction
- 6222 of groundwater flow;
- 6223
- 6224 ii) The proximity and withdrawal rates of groundwater users;
- 6225
- 6226 iii) The current and future uses of groundwater in the area; and
- 6227
- 6228 iv) The existing quality of groundwater, including other
- 6229 sources of contamination and their cumulative impact on
- 6230 the groundwater quality.
- 6231
- 6232 C) The potential adverse effects of a release on surface water quality,
- 6233 taking the following into account:
- 6234
- 6235 i) The quantity and quality of groundwater and the direction
- 6236 of groundwater flow;
- 6237
- 6238 ii) The patterns of rainfall in the region;
- 6239
- 6240 iii) The proximity of the tank system to surface waters;
- 6241
- 6242 iv) The current and future uses of surface waters in the area
- 6243 and water quality standards established for those surface
- 6244 waters; and
- 6245
- 6246 v) The existing quality of surface water, including other
- 6247 sources of contamination and the cumulative impact on
- 6248 surface water quality.
- 6249
- 6250 D) The potential adverse effect of a release on the land surrounding
- 6251 the tank system, taking the following into account:
- 6252
- 6253 i) The patterns of rainfall in the region; and
- 6254
- 6255 ii) The current and future uses of the surrounding land.
- 6256
- 6257 3) The owner or operator of a tank system, for which alternative design and
- 6258 operating practices had been granted in accordance with the requirements
- 6259 of subsection (g)(1) of this Section, at which a release of hazardous waste
- 6260 has occurred from the primary tank system but which has not migrated
- 6261 beyond the zone of engineering control (as established in the alternative

- 6262 design and operating practices), must do the following:  
6263  
6264 A) It must comply with the requirements of Section 724.296, except  
6265 Section 724.296(d); and  
6266  
6267 B) It must decontaminate or remove contaminated soil to the extent  
6268 necessary to do the following:  
6269  
6270 i) Enable the tank system for which the alternative design and  
6271 operating practices were granted to resume operation with  
6272 the capability for the detection of releases at least  
6273 equivalent to the capability it had prior to the release; and  
6274  
6275 ii) Prevent the migration of hazardous waste or hazardous  
6276 constituents to groundwater or surface water; and  
6277  
6278 C) If contaminated soil cannot be removed or decontaminated in  
6279 accordance with subsection (g)(3)(B) of this Section, the owner or  
6280 operator must comply with the requirement of Section 724.297(b).  
6281  
6282 4) The owner or operator of a tank system, for which alternative design and  
6283 operating practices had been granted in accordance with the requirements  
6284 of subsection (g)(1) of this Section, at which a release of hazardous waste  
6285 has occurred from the primary tank system and which has migrated  
6286 beyond the zone of engineering control (as established in the alternative  
6287 design and operating practices), must do the following:  
6288  
6289 A) Comply with the requirements of Section 724.296(a), (b), (c), and  
6290 (d); and  
6291  
6292 B) Prevent the migration of hazardous waste or hazardous constituents  
6293 to groundwater or surface water, if possible, and decontaminate or  
6294 remove contaminated soil. If contaminated soil cannot be  
6295 decontaminated or removed, or if groundwater has been  
6296 contaminated, the owner or operator must comply with the  
6297 requirements of Section 724.297(b); and  
6298  
6299 C) If repairing, replacing or reinstalling the tank system, provide  
6300 secondary containment in accordance with the requirements of  
6301 subsections (a) through (f) of this Section, or make the alternative  
6302 design and operating practices demonstration to the Board again,  
6303 and meet the requirements for new tank systems in Section  
6304 724.292 if the tank system is replaced. The owner or operator

6305 must comply with these requirements even if contaminated soil is  
 6306 decontaminated or removed and groundwater or surface water has  
 6307 not been contaminated.  
 6308

6309 h) In order to make an alternative design and operating practices, the owner or  
 6310 operator must follow the following procedures in addition to those specified in  
 6311 Section 28.1 of the Act [~~415 ILCS 5/28.1~~] and 35 Ill. Adm. Code 101 and 104:  
 6312

6313 1) The owner or operator must file a petition for approval of alternative  
 6314 design and operating practices according to the following schedule:  
 6315

6316 A) For existing tank systems, at least 24 months prior to the date that  
 6317 secondary containment must be provided in accordance with  
 6318 subsection (a) ~~of this Section~~.  
 6319

6320 B) For new tank systems, at least 30 days prior to entering into a  
 6321 contract for installation.  
 6322

6323 2) As part of the petition, the owner or operator must also submit the  
 6324 following to the Board:  
 6325

6326 A) A description of the steps necessary to conduct the demonstration  
 6327 and a timetable for completing each of the steps. The  
 6328 demonstration must address each of the factors listed in subsection  
 6329 (g)(1) or (g)(2) ~~of this Section~~; and  
 6330

6331 B) The portion of the Part B permit application specified in 35 Ill.  
 6332 Adm. Code 703.202.  
 6333

6334 3) The owner or operator must complete its showing within 180 days after  
 6335 filing its petition for approval of alternative design and operating  
 6336 practices.  
 6337

6338 4) The Agency must issue or modify the RCRA permit so as to require the  
 6339 permittee to construct and operate the tank system in the manner that was  
 6340 provided in any Board order approving alternative design and operating  
 6341 practices.  
 6342

6343 i) All tank systems, until such time as secondary containment that meets the  
 6344 requirements of this Section is provided, must comply with the following:  
 6345

6346 1) For non-enterable underground tanks, a leak test that meets the  
 6347 requirements of Section 724.291(b)(5) or other tank integrity methods, as

6348 approved or required by the Agency, must be conducted at least annually.  
6349

6350 2) For other than non-enterable underground tanks, the owner or operator  
6351 must do either of the following:

6352 A) Conduct a leak test, as in subsection (i)(1) ~~of this Section~~; or

6353 B) Develop a schedule and procedure for an assessment of the overall  
6354 condition of the tank system by a qualified Professional Engineer.  
6355 The schedule and procedure must be adequate to detect obvious  
6356 cracks, leaks, and corrosion or erosion that may lead to cracks and  
6357 leaks. The owner or operator must remove the stored waste from  
6358 the tank, if necessary, to allow the condition of all internal tank  
6359 surfaces to be assessed. The frequency of these assessments must  
6360 be based on the material of construction of the tank and its  
6361 ancillary equipment, the age of the system, the type of corrosion or  
6362 erosion protection used, the rate of corrosion or erosion observed  
6363 during the previous inspection and the characteristics of the waste  
6364 being stored or treated.  
6365  
6366

6367 3) For ancillary equipment, a leak test or other integrity assessment, as  
6368 approved by the Agency, must be conducted at least annually.  
6369

6370 BOARD NOTE: The practices described in the API Publication, "Guide  
6371 for Inspection of Refinery Equipment," Chapter XIII, "Atmospheric and  
6372 Low-Pressure Storage Tanks," incorporated by reference in 35 Ill. Adm.  
6373 Code 720.111(a), may be used, where applicable, as a guideline for  
6374 assessing the overall condition of the tank system.  
6375

6376 4) The owner or operator must maintain on file at the facility a record of the  
6377 results of the assessments conducted in accordance with subsections (i)(1)  
6378 through (i)(3) ~~of this Section~~.  
6379

6380 5) If a tank system or component is found to be leaking or unfit for use as a  
6381 result of the leak test or assessment in subsections (i)(1) through (1)(3) ~~of~~  
6382 ~~this Section~~, the owner or operator must comply with the requirements of  
6383 Section 724.296.  
6384

6385 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
6386

6387  
6388 **Section 724.295 Inspections**  
6389

6390 a) The owner or operator must develop and follow a schedule and procedure for

- 6391 inspecting overfill controls.  
 6392  
 6393 b) The owner or operator must inspect at least once each operating day data gathered  
 6394 from monitoring and leak detection equipment (e.g., pressure or temperature  
 6395 gauges, monitoring wells, etc.) to ensure that the tank system is being operated  
 6396 according to its design.  
 6397  
 6398 BOARD NOTE: Section 724.115(c) requires the owner or operator to remedy  
 6399 any deterioration or malfunction the owner or operator finds. Section 724.296  
 6400 requires the owner or operator to notify the Agency within 24 hours of confirming  
 6401 a leak. Also federal 40 CFR 302.6 may require the owner or operator to notify the  
 6402 National Response Center of a release.  
 6403  
 6404 c) In addition, except as noted under subsection (d) of this Section, the owner or  
 6405 operator must inspect the following at least once each operating day:  
 6406  
 6407 1) Above ground portions of the tank system, if any, to detect corrosion or  
 6408 releases of waste; and  
 6409  
 6410 2) The construction materials and the area immediately surrounding the  
 6411 externally accessible portion of the tank system, including the secondary  
 6412 containment system (e.g., dikes) to detect erosion or signs of releases of  
 6413 hazardous waste (e.g., wet spots, dead vegetation).  
 6414  
 6415 d) Owners or operators of tank systems that either use leak detection systems to alert  
 6416 facility personnel to leaks, or implement established workplace practices to ensure  
 6417 leaks are promptly identified, must inspect at least weekly those areas described  
 6418 in subsections (c)(1) and (c)(2) of this Section. Use of the alternate inspection  
 6419 schedule must be documented in the facility's operating record. This  
 6420 documentation must include a description of the established workplace practices  
 6421 at the facility.  
 6422  
 6423 e) This subsection (e) corresponds with 40 CFR 264.195(e), which USEPA removed  
 6424 and marked "reserved" ~~became obsolete when USEPA terminated the Performance~~  
 6425 ~~Track Program at 74 Fed. Reg. 22741 (May 14, 2009). USEPA has recognized~~  
 6426 ~~that program-related rules are no longer effective at 75 Fed. Reg. 12989, 12992,~~  
 6427 ~~note 1 (Mar. 18, 2010).~~ This statement maintains structural consistency with the  
 6428 corresponding federal requirements.  
 6429  
 6430 f) Ancillary equipment that is not provided with secondary containment, as  
 6431 described in Section 724.293(f)(1) through (f)(4), must be inspected at least once  
 6432 each operating day.  
 6433

- 6434 g) The owner or operator must inspect cathodic protection systems, if present,  
6435 according to, at a minimum, the following schedule to ensure that they are  
6436 functioning properly:  
6437  
6438 1) The proper operation of the cathodic protection system must be confirmed  
6439 within six months after initial installation and annually thereafter; and  
6440  
6441 2) All sources of impressed current must be inspected or tested, as  
6442 appropriate, at least bimonthly (i.e., every other month).  
6443

6444 BOARD NOTE: The practices described in "Control of External Corrosion on  
6445 Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems," NACE  
6446 Recommended Practice RP0285-85 and "Cathodic Protection of Underground  
6447 Petroleum Storage Tanks and Piping Systems," API Recommended Practice  
6448 1632, each incorporated by reference in 35 Ill. Adm. Code 720.111(a), may be  
6449 used, where applicable, as guidelines in maintaining and inspecting cathodic  
6450 protection systems.  
6451

- 6452 h) The owner or operator must document in the operating record of the facility an  
6453 inspection of those items in subsections (a) through (c) of this Section.  
6454

6455 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
6456

6457 **Section 724.296 Response to Leaks or Spills and Disposition of Leaking or Unfit-for-Use**  
6458 **Tank Systems**  
6459

6460 A tank system or secondary containment system from which there has been a leak or spill, or  
6461 which is unfit for use, must be removed from service immediately, and the owner or operator  
6462 must satisfy the following requirements:  
6463

- 6464 a) Cease ~~Using~~using; ~~Prevent Flow~~prevent flow or ~~Addition~~addition of  
6465 ~~Wastes~~wastes. The owner or operator must immediately stop the flow of  
6466 hazardous waste into the tank system or secondary containment system and  
6467 inspect the system to determine the cause of the release.  
6468  
6469 b) Removal of ~~Waste~~waste from ~~Tank System~~tank system or ~~Secondary~~  
6470 ~~Containment System~~secondary containment system.  
6471  
6472 1) If the release was from the tank system, the owner or operator must,  
6473 within 24 hours after detection of the leak or as otherwise provided in the  
6474 permit, remove as much of the waste as is necessary to prevent further  
6475 release of hazardous waste to the environment and to allow inspection and  
6476 repair of the tank system to be performed.

- 6477  
6478  
6479  
6480  
6481  
6482  
6483  
6484  
6485  
6486  
6487  
6488  
6489  
6490  
6491  
6492  
6493  
6494  
6495  
6496  
6497  
6498  
6499  
6500  
6501  
6502  
6503  
6504  
6505  
6506  
6507  
6508  
6509  
6510  
6511  
6512  
6513  
6514  
6515  
6516  
6517  
6518  
6519
- 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~~visible releases~~ to the Environment~~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~~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 (0.45 kg); 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

6520 populated areas; and

6521  
6522 E) Description of response actions taken or planned.

6523  
6524 e) Provision of Secondary Containment, Repair, secondary containment, repair, or  
6525 Closure.

6526  
6527 1) Unless the owner or operator satisfies the requirements of subsections  
6528 (e)(2) through (e)(4) of this Section, the tank system must be closed in  
6529 accordance with Section 724.297.

6530  
6531 2) If the cause of the release was a spill that has not damaged the integrity of  
6532 the system, the owner or operator may return the system to service as soon  
6533 as the released waste is removed and repairs, if necessary, are made.

6534  
6535 3) If the cause of the release was a leak from the primary tank system into the  
6536 secondary containment system, the system must be repaired prior to  
6537 returning the tank system to service.

6538  
6539 4) If the source of the release was a leak to the environment from a  
6540 component of a tank system without secondary containment, the owner or  
6541 operator must provide the component of the system from which the leak  
6542 occurred with secondary containment that satisfies the requirements of  
6543 Section 724.293 before it can be returned to service, unless the source of  
6544 the leak is an aboveground portion of a tank system that can be inspected  
6545 visually. If the source is an aboveground component that can be inspected  
6546 visually, the component must be repaired and may be returned to service  
6547 without secondary containment, as long as the requirements of subsection  
6548 (f) of this Section are satisfied. If a component is replaced to comply with  
6549 the requirements of this subsection (e), that component must satisfy the  
6550 requirements of new tank systems or components in Sections 724.292 and  
6551 724.293. Additionally, if a leak has occurred in any portion of a tank  
6552 system component that is not readily accessible for visual inspection (e.g.,  
6553 the bottom of an in-ground or on-ground tank), the entire component must  
6554 be provided with secondary containment in accordance with Section  
6555 724.293 prior to being returned to use.

6556  
6557 f) Certification of Major Repairsmajor repairs. If the owner or operator has repaired  
6558 a tank system in accordance with subsection (e) of this Section, and the repair has  
6559 been extensive (e.g., installation of an internal liner, repair, or a ruptured primary  
6560 containment or secondary containment vessel), the tank system must not be  
6561 returned to service unless the owner or operator has obtained a certification by a  
6562 qualified Professional Engineer, in accordance with 35 Ill. Adm. Code

6563 702.126(d), that the repaired system is capable of handling hazardous wastes  
6564 without release for the intended life of the system. This certification must be  
6565 placed in the operating record and maintained until closure of the facility.  
6566

6567 BOARD NOTE: See Section 724.115(c) for the requirements necessary to remedy a  
6568 failure. Also, federal 40 CFR 302.6 may require the owner or operator to notify the  
6569 National Response Center of any "reportable quantity".  
6570

6571 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
6572

6573 **Section 724.297 Closure and Post-Closure Care**  
6574

- 6575 a) At closure of a tank system, the owner or operator must remove or decontaminate  
6576 all waste residues, contaminated containment system components (liners, etc.),  
6577 contaminated soils and structures and equipment contaminated with waste, and  
6578 manage them as hazardous waste, unless 35 Ill. Adm. Code 721.103(d) applies.  
6579 The closure plan, closure activities, cost estimates for closure and financial  
6580 responsibility for tank systems must meet all of the requirements specified in  
6581 Subparts G and H of this Part.  
6582
- 6583 b) If the owner or operator demonstrates to the Agency by way of permit application  
6584 that not all contaminated soils can be practicably removed or decontaminated, as  
6585 required in subsection (a) of this Section, then the owner or operator must close  
6586 the tank system and perform post-closure care in accordance with the closure and  
6587 post-closure care requirements that apply to landfills (Section 724.410). In  
6588 addition, for the purposes of closure, post-closure and financial responsibility,  
6589 such a tank system is then considered to be a landfill, and the owner or operator  
6590 must meet all of the requirements for landfills specified in Subparts G and H of  
6591 this Part.  
6592
- 6593 c) If an owner or operator has a tank system that does not have secondary  
6594 containment which meets the requirements of Section 724.193(b) through (f), and  
6595 the owner and operator has not been granted alternative design and operating  
6596 practices for secondary containment requirements in accordance with Section  
6597 724.293(g), then the following apply:  
6598
- 6599 1) The closure plan for the tank system must include both a plan for  
6600 complying with subsection (a) of this Section and a contingent plan for  
6601 complying with subsection (b) of this Section.  
6602
  - 6603 2) A contingent post-closure plan for complying with subsection (b) of this  
6604 Section must be prepared and submitted as part of the permit application.  
6605

- 6606 3) The cost estimates calculated for closure and post-closure care must reflect  
6607 the costs of complying with the contingent closure plan and the contingent  
6608 post-closure plan if those costs are greater than the costs of complying  
6609 with the closure plan prepared for the expected closure under subsection  
6610 (a) of this Section.
- 6611
- 6612 4) Financial assurance must be based on the cost estimates in subsection  
6613 (c)(3) of this Section.
- 6614
- 6615 5) For the purposes of the contingent closure and post-closure plans, such a  
6616 tank system is considered to be a landfill, and the contingent plans must  
6617 meet all of the closure, post-closure, and financial responsibility  
6618 requirements for landfills under Subparts G and H of this Part.
- 6619

6620 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

6621

6622 **Section 724.298 Special Requirements for Ignitable or Reactive Waste**

- 6623
- 6624 a) Ignitable or reactive waste must not be placed in tank systems unless the  
6625 following is true:
  - 6626
  - 6627 1) The waste is treated, rendered, or mixed before or immediately after  
6628 placement in the tank system so that the following is true:
    - 6629
    - 6630 A) The resulting waste, mixture, or dissolved material no longer meets  
6631 the definition of ignitable or reactive waste under 35 Ill. Adm.  
6632 Code 721.121 or 721.123; and
    - 6633
    - 6634 B) Section 724.117(b) is complied with; or
    - 6635
  - 6636 2) The waste is stored or treated in such a way that it is protected from any  
6637 material or conditions that may cause the waste to ignite or react; or
  - 6638
  - 6639 3) The tank is used solely for emergencies.
- 6640
- 6641 b) The owner or operator of a facility where ignitable or reactive waste is stored or  
6642 treated in a tank must comply with the requirements for the maintenance of  
6643 protective distances between the waste management area and any public ways,  
6644 streets, alleys, or an adjoining property line that can be built upon, as required in  
6645 tables 2-1 through 2-6 of "Flammable and Combustible Liquids Code," NFPA  
6646 30, incorporated by reference in 35 Ill. Adm. Code 720.111(a).
- 6647

6648 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

6649  
6650  
6651  
6652  
6653  
6654  
6655  
6656  
6657  
6658  
6659  
6660  
6661  
6662  
6663  
6664  
6665  
6666  
6667  
6668  
6669  
6670  
6671  
6672  
6673  
6674  
6675  
6676  
6677  
6678  
6679  
6680  
6681  
6682  
6683  
6684  
6685  
6686  
6687  
6688  
6689  
6690  
6691

**Section 724.300 Air Emission Standards**

The owner or operator must manage all hazardous waste placed in a tank in accordance with the requirements of Subparts AA, BB, and CC of this Part.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**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

6692 justification is a demonstration by the owner or operator that alternative design or  
 6693 operating practices, together with location characteristics, will prevent the  
 6694 migration of any hazardous constituents (see Section 724.193) into the  
 6695 groundwater or surface water at any future time. In deciding whether to grant an  
 6696 adjusted standard, the Board will consider the following:

- 6697 1) The nature and quantity of the wastes;
- 6698 2) The proposed alternative design and operation;
- 6699 3) The hydrogeologic setting of the facility, including the attenuative  
 6700 capacity and thickness of the liners and soils present between the  
 6701 impoundment and groundwater or surface water; and
- 6702 4) All other factors that would influence the quality and mobility of the  
 6703 leachate produced and the potential for it to migrate to groundwater or  
 6704 surface water;
- 6705
- 6706
- 6707
- 6708
- 6709

6710 c) The owner or operator of each new surface impoundment unit on which  
 6711 construction commences after January 29, 1992, each lateral expansion of a  
 6712 surface impoundment unit on which construction commences after July 29, 1992,  
 6713 and each replacement of an existing surface impoundment unit that is to  
 6714 commence reuse after July 29, 1992, must install two or more liners and a  
 6715 leachate collection and removal system between such liners. "Construction  
 6716 commences" is as defined in 35 Ill. Adm. Code 720.110, under the definition of  
 6717 "existing facility:".

6718 1) Liner requirements.

6719 A) The liner system must include the following:

- 6720 i) A top liner designed and constructed of materials (e.g., a  
 6721 geomembrane) to prevent the migration of hazardous  
 6722 constituents into such liner during the active life and post-  
 6723 closure care period; and
- 6724 ii) A composite bottom liner, consisting of at least two  
 6725 components. The upper component must be designed and  
 6726 constructed of materials (e.g., a geomembrane) to prevent  
 6727 the migration of hazardous constituents into this component  
 6728 during the active life and post-closure care period. The  
 6729 lower component must be designed and constructed of  
 6730 materials to minimize the migration of hazardous  
 6731
- 6732
- 6733
- 6734

constituents if a breach in the upper component were to occur. The lower component must be constructed of at least three feet (91 cm) of compacted soil material with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec.

- 6735
  - 6736
  - 6737
  - 6738
  - 6739
  - 6740
  - 6741
  - 6742
  - 6743
  - 6744
  - 6745
  - 6746
  - 6747
  - 6748
  - 6749
  - 6750
  - 6751
  - 6752
  - 6753
  - 6754
  - 6755
  - 6756
  - 6757
  - 6758
  - 6759
  - 6760
  - 6761
  - 6762
  - 6763
  - 6764
  - 6765
  - 6766
  - 6767
  - 6768
  - 6769
  - 6770
  - 6771
  - 6772
  - 6773
  - 6774
  - 6775
  - 6776
  - 6777
- 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  $1 \times 10^1$  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  $3 \times 10^4$  m<sup>2</sup>/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.

- 6778  
6779  
6780  
6781  
6782  
6783  
6784  
6785  
6786  
6787  
6788  
6789  
6790  
6791  
6792  
6793  
6794  
6795  
6796  
6797  
6798  
6799  
6800  
6801  
6802  
6803  
6804  
6805  
6806  
6807  
6808  
6809  
6810  
6811  
6812  
6813  
6814  
6815  
6816  
6817  
6818  
6819  
6820
- 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

- 6821 subsection (c) of this Section on the basis of a liner  
6822 designed, constructed, installed, and operated to prevent  
6823 hazardous waste from passing beyond the liner, at the  
6824 closure of such impoundment, the owner or operator must  
6825 remove or decontaminate all waste residues, all  
6826 contaminated liner material, and contaminated soil to the  
6827 extent practicable. If all contaminated soil is not removed  
6828 or decontaminated, the owner or operator of such  
6829 impoundment will comply with appropriate post-closure  
6830 requirements, including but not limited to groundwater  
6831 monitoring and corrective action;
- 6832
- 6833 ii) The monofill is located more than one-quarter mile from an  
6834 "underground source of drinking water" (as that term is  
6835 defined in 35 Ill. Adm. Code 702.110); and
- 6836
- 6837 iii) The monofill is in compliance with generally applicable  
6838 groundwater monitoring requirements for facilities with  
6839 permits; or
- 6840
- 6841 B) The owner or operator demonstrates to the Board that the monofill  
6842 is located, designed, and operated so as to assure that there will be  
6843 no migration of any hazardous constituent into groundwater or  
6844 surface water at any future time.
- 6845
- 6846 f) The owner or operator of any replacement surface impoundment unit is exempt  
6847 from subsection (c) of this Section if the following is true of the unit:
- 6848
- 6849 1) The existing unit was constructed in compliance with the design standards  
6850 of 35 Ill. Adm. Code 724.321(c), (d), and (e); and
- 6851
- 6852 BOARD NOTE: The cited subsections implemented the design standards  
6853 of sections 3004 (o)(1)(A)(i) and (o)(5) of the Resource Conservation and  
6854 Recovery Act (42 USC 6924(o)(1)(A)(i) and (o)(5)~~6901 et seq.~~).
- 6855
- 6856 2) There is no reason to believe that the liner is not functioning as designed.
- 6857
- 6858 g) A surface impoundment must be designed, constructed, maintained, and operated  
6859 to prevent overtopping resulting from normal or abnormal operations; overflowing;  
6860 wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms,  
6861 and other equipment; and human error.
- 6862
- 6863 h) A surface impoundment must have dikes that are designed, constructed, and

6864 maintained with sufficient structural integrity to prevent massive failure of the  
6865 dikes. In ensuring structural integrity, it must not be presumed that the liner  
6866 system will function without leakage during the active life of the unit.  
6867

- 6868 i) The Agency must specify in the permit all design and operating practices that are  
6869 necessary to ensure that the requirements of this Section are satisfied.  
6870

6871 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
6872

6873 **Section 724.323 Response Actions**  
6874

- 6875 a) The owner or operator of surface impoundment units subject to Section  
6876 724.321(c) or (d) must have an approved response action plan before receipt of  
6877 waste. The response action plan must set forth the actions to be taken if the action  
6878 leakage rate has been exceeded. At a minimum, the response action plan must  
6879 describe the actions specified in subsection (b) of this Section.  
6880
- 6881 b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the  
6882 owner or operator must do the following:  
6883
- 6884 1) Notify the Agency in writing of the exceedance within seven days after the  
6885 determination;
  - 6886
  - 6887 2) Submit a preliminary written assessment to the Agency within 14 days  
6888 after the determination, as to the amount of liquids, likely sources of  
6889 liquids, possible location, size and cause of any leaks, and short-term  
6890 actions taken and planned;
  - 6891
  - 6892 3) Determine to the extent practicable the location, size, and cause of any  
6893 leak;
  - 6894
  - 6895 4) Determine whether waste receipt should cease or be curtailed, whether any  
6896 waste should be removed from the unit for inspection, repairs or controls,  
6897 and whether or not the unit should be closed;
  - 6898
  - 6899 5) Determine any other short-term and longer-term actions to be taken to  
6900 mitigate or stop any leaks; and  
6901
  - 6902 6) Within 30 days after the notification that the action leakage rate has been  
6903 exceeded, submit to the Agency the results of the determinations specified  
6904 in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of  
6905 actions taken, and actions planned. Monthly thereafter, as long as the flow  
6906 rate in the LDS exceeds the action leakage rate, the owner or operator

6907 must submit to the Agency a report summarizing the results of any  
6908 remedial actions taken and actions planned.

- 6909
- 6910 c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and  
6911 (b)(5) ~~of this Section~~, the owner or operator must do either of the following:
- 6912
- 6913 1) Perform the following assessments:
- 6914
- 6915 A) Assess the source of liquids and amounts of liquids by source;
- 6916
- 6917 B) Conduct a fingerprint, hazardous constituent, or other analyses of  
6918 the liquids in the LDS to identify the source of liquids and possible  
6919 location of any leaks, and the hazard and mobility of the liquid;  
6920 and
- 6921
- 6922 C) Assess the seriousness of any leaks in terms of potential for  
6923 escaping into the environment; or
- 6924
- 6925 2) Document why such assessments are not needed.
- 6926

6927 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

6928

6929 **Section 724.327 Emergency Repairs; Contingency Plans**

6930

- 6931 a) A surface impoundment must be removed from service in accordance with  
6932 subsection (b) ~~of this Section~~ when either of the following occurs:
- 6933
- 6934 1) The level of liquids in the impoundment suddenly drops and the drop is  
6935 not known to be caused by changes in the flows into or out of the  
6936 impoundment; or
- 6937
- 6938 2) The dike leaks.
- 6939
- 6940 b) When a surface impoundment must be removed from service as required by  
6941 subsection (a) ~~of this Section~~, the owner or operator must do the following:
- 6942
- 6943 1) Immediately shut off the flow or stop the addition of wastes into the  
6944 impoundment;
- 6945
- 6946 2) Immediately contain any surface leakage that has occurred or is occurring;
- 6947
- 6948 3) Immediately stop the leak;
- 6949

- 6950 4) Take any other necessary steps to stop or prevent catastrophic failure;
- 6951
- 6952 5) If a leak cannot be stopped by any other means, empty the impoundment;
- 6953 and
- 6954
- 6955 6) Notify the Agency of the problem in writing within seven days after
- 6956 detecting the problem.
- 6957
- 6958 c) As part of the contingency plan required in Subpart D of this Part, the owner or
- 6959 operator must specify a procedure for complying with the requirements of
- 6960 subsection (b) of this Section.
- 6961
- 6962 d) No surface impoundment that has been removed from service in accordance with
- 6963 the requirements of this section may be restored to service unless the portion of
- 6964 the impoundment that was failing is repaired and the following steps are taken:
- 6965
- 6966 1) If the impoundment was removed from service as the result of actual or
- 6967 imminent dike failure, the dike's structural integrity must be re-certified in
- 6968 accordance with Section 724.326(c).
- 6969
- 6970 2) If the impoundment was removed from service as the result of a sudden
- 6971 drop in the liquid level, then the following apply:
- 6972
- 6973 A) For any existing portion of the impoundment, a liner must be
- 6974 installed in compliance with Section 724.321(a) or 724.322; and
- 6975
- 6976 B) For any other portion of the impoundment, the repaired liner
- 6977 system must be certified by a qualified engineer as meeting the
- 6978 design specifications approved in the permit.
- 6979
- 6980 e) A surface impoundment that has been removed from service in accordance with
- 6981 the requirements of this Section and that is not being repaired must be closed in
- 6982 accordance with the provisions of Section 724.328.

6983 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

6984

6985

6986 **Section 724.328 Closure and Post-Closure Care**

6987

- 6988 a) At closure, the owner or operator must do the following:
- 6989
- 6990 1) Remove or decontaminate all waste residues, contaminated containment
- 6991 system components (liners, etc.), contaminated subsoils and structures,
- 6992 and equipment contaminated with waste and leachate, and manage them as

- 6993 hazardous waste, unless 35 Ill. Adm. Code 721.103(d) applies; or  
6994  
6995 2) Closure in place.  
6996  
6997 A) Eliminate free liquids by removing liquid wastes or solidifying the  
6998 remaining wastes and waste residues;  
6999  
7000 B) Stabilize remaining wastes to a bearing capacity sufficient to  
7001 support final cover; and  
7002  
7003 C) Cover the surface impoundment with a final cover designed and  
7004 constructed to do the following:  
7005  
7006 i) Provide long-term minimization of the migration of liquids  
7007 through the closed impoundment;  
7008  
7009 ii) Function with minimum maintenance;  
7010  
7011 iii) Promote drainage and minimize erosion or abrasion of the  
7012 final cover;  
7013  
7014 iv) Accommodate settling and subsidence so that the cover's  
7015 integrity is maintained; and  
7016  
7017 v) Have a permeability less than or equal to the permeability  
7018 of any bottom liner system or natural subsoils present.  
7019  
7020 b) If some waste residues or contaminated materials are left in place at final closure,  
7021 the owner or operator must comply with all post-closure requirements contained  
7022 in Sections 724.217 through 724.220, including maintenance and monitoring  
7023 throughout the post-closure care period (specified in the permit under Section  
7024 724.217). The owner or operator must do the following:  
7025  
7026 1) Maintain the integrity and effectiveness of the final cover, including  
7027 making repairs to the cap, as necessary to correct the effects of settling,  
7028 subsidence, erosion, or other events;  
7029  
7030 2) Maintain and monitor the LDS in accordance with Sections  
7031 724.321(c)(2)(D) and (c)(3) and 724.326(d), and comply with all other  
7032 applicable LDS requirements of this Part;  
7033  
7034 3) Maintain and monitor the groundwater monitoring system and comply  
7035 with all other applicable requirements of Subpart F of this Part; and

7036  
7037  
7038  
7039  
7040  
7041  
7042  
7043  
7044  
7045  
7046  
7047  
7048  
7049  
7050  
7051  
7052  
7053  
7054  
7055  
7056  
7057  
7058  
7059  
7060  
7061  
7062  
7063  
7064  
7065  
7066  
7067  
7068  
7069  
7070  
7071  
7072  
7073  
7074  
7075  
7076  
7077  
7078

4) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

c) Contingent plans.

1) If an owner or operator plans to close a surface impoundment in accordance with subsection (a)(1) ~~of this Section~~, and the impoundment does not comply with the liner requirements of Section 724.321(a) and is not exempt from them in accordance with Section 724.321(b), then the following apply:

A) The closure plan for the impoundment under Section 724.212 must include both a plan for complying with subsection (a)(1) ~~of this Section~~ and a contingent plan for complying with subsection (a)(2) ~~of this Section~~ in case not all contaminated subsoils can be practicably removed at closure; and

B) The owner or operator must prepare a contingent post-closure plan under Section 724.218 for complying with subsection (b) ~~of this Section~~ in case not all contaminated subsoils can be practicably removed at closure.

2) The cost estimates calculated under Sections 724.242 and 724.244 for closure and post-closure care of an impoundment subject to this subsection (c) must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under subsection (a)(1) ~~of this Section~~.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.332 Air Emission Standards**

The owner or operator must manage all hazardous waste placed in a surface impoundment in accordance with the requirements of Subparts BB and CC ~~of this Part~~.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**SUBPART L: WASTE PILES**

**Section 724.350 Applicability**

a) The regulations in this Subpart L apply to owners and operators of facilities that

7079 store or treat hazardous waste in piles, except as Section 724.101 provides  
7080 otherwise.

- 7081
- 7082 b) The regulations in this Subpart L do not apply to owners or operators of waste  
7083 piles that are closed with wastes left in place. Such waste piles are subject to  
7084 regulation under Subpart N ~~of this Part~~ (Landfills).
- 7085
- 7086 c) The owner or operator of any waste pile that is inside or under a structure that  
7087 provides protection from precipitation so that neither run-off nor leachate is  
7088 generated is not subject to regulation under Section 724.351 or under Subpart F ~~of~~  
7089 ~~this Part~~ (Groundwater Protection), provided that the following is true:
- 7090
- 7091 1) Liquids or materials containing free liquids are not placed in the pile;
  - 7092 2) The pile is protected from surface water run-on by the structure or in some  
7093 other manner;
  - 7094 3) The pile is designed and operated to control dispersal of the waste by  
7095 wind, where necessary, by means other than wetting; and
  - 7096 4) The pile will not generate leachate through decomposition or other  
7097 reactions;
  - 7098
  - 7099
  - 7100

7101 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

7102

7103

7104 **Section 724.351 Design and Operating Requirements**

- 7105
- 7106 a) A waste pile (except for an existing portion of a waste pile) must have the  
7107 following:
- 7108
- 7109 1) A liner that is designed, constructed, and installed to prevent any  
7110 migration of wastes out of the pile into the adjacent subsurface soil or  
7111 groundwater or surface water at any time during the active life (including  
7112 the closure period) of the waste pile. The liner may be constructed of  
7113 materials that may allow waste to migrate into the liner itself (but not into  
7114 the adjacent subsurface soil or groundwater or surface water) during the  
7115 active life of the facility. The liner must be as follows:
  - 7116
  - 7117 A) Constructed of materials that have appropriate chemical properties  
7118 and sufficient strength and thickness to prevent failure due to  
7119 pressure gradients (including static head and external  
7120 hydrogeologic forces), physical contact with the waste or leachate  
7121 to which they are exposed, climatic conditions, the stress of

7122 installation, and the stress of daily operation;  
7123

7124 B) Placed upon a foundation or base capable of providing support to  
7125 the liner and resistance to pressure gradients above and below the  
7126 liner to prevent failure of the liner due to settlement, compression,  
7127 or uplift; and  
7128

7129 C) Installed to cover all surrounding earth likely to be in contact with  
7130 the waste or leachate; and  
7131

7132 2) A leachate collection and removal system immediately above the liner that  
7133 is designed, constructed, maintained, and operated to collect and remove  
7134 leachate from the pile. The Agency must specify design and operating  
7135 conditions in the permit to ensure that the leachate depth over the liner  
7136 does not exceed 30 cm (one foot). The leachate collection and removal  
7137 system must be as follows:  
7138

7139 A) Constructed of materials that are as follows:  
7140

7141 i) Chemically resistant to the waste managed in the pile and  
7142 the leachate expected to be generated; and  
7143

7144 ii) Of sufficient strength and thickness to prevent collapse  
7145 under the pressures exerted by overlying wastes, waste  
7146 cover materials and by any equipment used at the pile; and  
7147

7148 B) Designed and operated to function without clogging through the  
7149 scheduled closure of the waste pile.  
7150

7151 b) The owner or operator will be exempted from the requirements of subsection (a)  
7152 of this Section if the Board grants an adjusted standard pursuant to Section 28.1 of  
7153 the Act [415 ILCS 5/28.1] and 35 Ill. Adm. Code 101 and 104. The level of  
7154 justification is a demonstration by the owner or operator that alternative design or  
7155 operating practices, together with location characteristics, will prevent the  
7156 migration of any hazardous constituents (see Section 724.193) into the  
7157 groundwater or surface water at any future time. In deciding whether to grant an  
7158 adjusted standard, the Board will consider the following:  
7159

7160 1) The nature and quantity of the wastes;  
7161

7162 2) The proposed alternative design and operation;  
7163

7164 3) The hydrogeologic setting of the facility, including attenuative capacity

- 7165 and thickness of the liners and soils present between the pile and  
 7166 groundwater or surface water; and  
 7167  
 7168 4) All other factors that influence the quality and mobility of the leachate  
 7169 produced and the potential for it to migrate to groundwater or surface  
 7170 water.  
 7171  
 7172 c) The owner or operator of each new waste pile unit, each lateral expansion of a  
 7173 waste pile unit, and each replacement of an existing waste pile unit must install  
 7174 two or more liners and a leachate collection and removal system above and  
 7175 between such liners.  
 7176  
 7177 1) Liners.  
 7178  
 7179 A) The liner system must include the following:  
 7180  
 7181 i) A top liner designed and constructed of materials (e.g., a  
 7182 geomembrane) to prevent the migration of hazardous  
 7183 constituents into such liner during the active life and post-  
 7184 closure care period; and  
 7185  
 7186 ii) A composite bottom liner, consisting of at least two  
 7187 components. The upper component must be designed and  
 7188 constructed of materials (e.g., a geomembrane) to prevent  
 7189 the migration of hazardous constituents into this component  
 7190 during the active life and post-closure care period. The  
 7191 lower component must be designed and constructed of  
 7192 materials to minimize the migration of hazardous  
 7193 constituents if a breach in the upper component were to  
 7194 occur. The lower component must be constructed of at  
 7195 least 3 feet (91 cm) of compacted soil material with a  
 7196 hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec.  
 7197  
 7198 B) The liners must comply with subsections (a)(1)(A), (a)(1)(B), and  
 7199 (a)(1)(C) of this Section.  
 7200  
 7201 2) The leachate collection and removal system immediately above the top  
 7202 liner must be designed, constructed, operated, and maintained to collect  
 7203 and remove leachate from the waste pile during the active life and post-  
 7204 closure care period. The Agency must specify design and operating  
 7205 conditions in the permit to ensure that the leachate depth over the liner  
 7206 does not exceed 30 cm (one foot). The leachate collection and removal  
 7207 system must comply with subsections (c)(3)(C) and (c)(3)(D) of this

- 7208 Section.  
 7209  
 7210 3) The leachate collection and removal system between the liners, and  
 7211 immediately above the bottom composite liner in the case of multiple  
 7212 leachate collection and removal systems, is also a leak detection system  
 7213 (LDS). This LDS must be capable of detecting, collecting and removing  
 7214 leaks of hazardous constituents at the earliest practicable time through all  
 7215 areas of the top liner likely to be exposed to waste or leachate during the  
 7216 active life and post-closure care period. The requirements for a LDS in  
 7217 this subsection (c) are satisfied by installation of a system that is, at a  
 7218 minimum, as follows:  
 7219  
 7220 A) Constructed with a bottom slope of one percent or more;  
 7221  
 7222 B) Constructed of granular drainage materials with a hydraulic  
 7223 conductivity of  $1 \times 10^{-2}$  cm/sec or more and a thickness of 12 inches  
 7224 (30.5 cm) or more; or constructed of synthetic or geonet drainage  
 7225 materials with a transmissivity of  $3 \times 10^{-5}$  m<sup>2</sup>/sec or more;  
 7226  
 7227 C) Constructed of materials that are chemically resistant to the waste  
 7228 managed in the waste pile and the leachate expected to be  
 7229 generated, and of sufficient strength and thickness to prevent  
 7230 collapse under the pressures exerted by overlying wastes, waste  
 7231 cover materials, and equipment used at the waste pile;  
 7232  
 7233 D) Designed and operated to minimize clogging during the active life  
 7234 and post-closure care period; and  
 7235  
 7236 E) Constructed with sumps and liquid removal methods (e.g., pumps)  
 7237 of sufficient size to collect and remove liquids from the sump and  
 7238 prevent liquids from backing up into the drainage layer. Each unit  
 7239 must have its own sumps. The design of each sump and removal  
 7240 system must provide a method for measuring and recording the  
 7241 volume of liquids present in the sump and of liquids removed.  
 7242  
 7243 4) The owner or operator must collect and remove pumpable liquids in the  
 7244 LDS sumps to minimize the head on the bottom liner.  
 7245  
 7246 5) The owner or operator of a LDS that is not located completely above the  
 7247 seasonal high water table must demonstrate that the operation of the LDS  
 7248 will not be adversely affected by the presence of groundwater.  
 7249  
 7250 d) The Agency must approve alternative design or operating practices to those

- 7251 specified in subsection (c) of this Section if the owner or operator demonstrates to  
7252 the Agency, by way of permit or permit modification application, that such design  
7253 or operating practices, together with location characteristics, will do the  
7254 following:  
7255
- 7256 1) Will prevent the migration of any hazardous constituent into the ground  
7257 water or surface water at least as effectively as the liners and leachate  
7258 collection and removal systems specified in subsection (c) of this Section;  
7259 and  
7260
  - 7261 2) Will allow detection of leaks of hazardous constituents through the top  
7262 liner at least as effectively.  
7263
- 7264 e) Subsection (c) of this Section does not apply to monofills that are granted a  
7265 waiver by the Agency in accordance with Section 724.321(e).  
7266
- 7267 f) The owner or operator of any replacement waste pile unit is exempt from  
7268 subsection (c) of this Section if the following are true:  
7269
- 7270 1) The existing unit was constructed in compliance with the design standards  
7271 of section 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and  
7272 Recovery Act (42 USC 6924(o)(1)(A)(i) and (o)(5)~~6901~~ et seq.); and  
7273  
7274 BOARD NOTE: The cited provisions required the installation of two or  
7275 more liners and a leachate collection system above (in the case of a  
7276 landfill) and between such liners, including a top liner designed, operated  
7277 and constructed of materials to prevent the migration of any constituent  
7278 into such liner during the period the facility remained in operation  
7279 (including any post-closure monitoring period), and a lower liner to  
7280 prevent the migration of any constituent through the liner during such  
7281 period. The lower liner was deemed to satisfy the requirement if it was  
7282 constructed of at least a 3-foot thick layer of recompact clay or other  
7283 natural material with a permeability of no more than  $1 \times 10^{-7}$  cm/sec.  
7284
  - 7285 2) There is no reason to believe that the liner is not functioning as designed.  
7286
- 7287 g) The owner or operator must design, construct, operate, and maintain a run-on  
7288 control system capable of preventing flow onto the active portion of the pile  
7289 during peak discharge from at least a 25-year storm.  
7290
- 7291 h) The owner or operator must design, construct, operate, and maintain a run-off  
7292 management system to collect and control at least the water volume resulting  
7293 from a 24-hour, 25-year storm.

- 7294
- 7295 i) Collection and holding facilities (e.g., tanks or basins) associated with run-on and
- 7296 run-off control systems must be emptied or otherwise managed expeditiously after
- 7297 storms to maintain design capacity of the system.
- 7298
- 7299 j) If the pile contains any particulate matter that may be subject to wind dispersal,
- 7300 the owner or operator must cover or otherwise manage the pile to control wind
- 7301 dispersal.
- 7302
- 7303 k) The Agency must specify in the permit all design and operating practices that are
- 7304 necessary to ensure that the requirements of this Section are satisfied.
- 7305
- 7306 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)
- 7307

7308 **Section 724.353 Response Action Plan**

- 7309
- 7310 a) The owner or operator of waste pile units subject to Section 724.351(c) or (d)
- 7311 must have an approved response action plan before receipt of waste. The response
- 7312 action plan must set forth the actions to be taken if the action leakage rate has
- 7313 been exceeded. At a minimum, the response action plan must describe the actions
- 7314 specified in subsection (b) ~~of this Section.~~
- 7315
- 7316 b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the
- 7317 owner or operator must do the following:
- 7318
- 7319 1) Notify the Agency in writing of the exceedance within seven days after the
- 7320 determination;
- 7321
- 7322 2) Submit a preliminary written assessment to the Agency within 14 days
- 7323 after the determination, as to the amount of liquids, likely sources of
- 7324 liquids, possible location, size and cause of any leaks, and short-term
- 7325 actions taken and planned;
- 7326
- 7327 3) Determine to the extent practicable the location, size, and cause of any
- 7328 leak;
- 7329
- 7330 4) Determine whether waste receipt should cease or be curtailed; whether any
- 7331 waste should be removed from the unit for inspection, repairs, or controls;
- 7332 and whether the unit should be closed;
- 7333
- 7334 5) Determine any other short-term and long-term actions to be taken to
- 7335 mitigate or stop any leaks; and
- 7336

7337 6) Within 30 days after the notification that the action leakage rate has been  
7338 exceeded, submit to the Agency the results of the determinations specified  
7339 in subsections (b)(3), (b)(4), and (b)(5) ~~of this Section~~, the results of  
7340 actions taken, and actions planned. Monthly thereafter, as long as the flow  
7341 rate in the LDS exceeds the action leakage rate, the owner or operator  
7342 must submit to the Agency a report summarizing the results of any  
7343 remedial actions taken and actions planned.  
7344

7345 c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and  
7346 (b)(5) ~~of this Section~~, the owner or operator must do either of the following:  
7347

7348 1) Perform the following assessments:

7349 A) Assess the source of liquids and amounts of liquids by source;

7350 B) Conduct a fingerprint, hazardous constituent, or other analyses of  
7351 the liquids in the LDS to identify the source of liquids and possible  
7352 location of any leaks, and the hazard and mobility of the liquid;  
7353 and  
7354

7355 C) Assess the seriousness of any leaks in terms of potential for  
7356 escaping into the environment; or  
7357

7358 2) Document why such assessments are not needed.  
7359

7360 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
7361

7362 **Section 724.358 Closure and Post-Closure Care**  
7363

7364 a) At closure, the owner or operator must remove or decontaminate all waste  
7365 residues, contaminated containment system components (liners, etc),  
7366 contaminated subsoils, and structures and equipment contaminated with waste and  
7367 leachate and manage them as hazardous waste, unless 35 Ill. Adm. 721.103(d)  
7368 applies.  
7369

7370 b) If, after removing or decontaminating all residues and making all reasonable  
7371 efforts to effect removal or decontamination of contaminated components,  
7372 subsoils, structures, and equipment, as required in subsection (a) ~~of this Section~~,  
7373 the owner or operator finds that not all contaminated subsoils can be practicably  
7374 removed or decontaminated, it must close the facility and perform post-closure  
7375 care in accordance with the closure and post-closure care requirements that apply  
7376 to landfills (Section 724.410).  
7377  
7378  
7379

- 7380 c) Contingent closure plan.  
 7381  
 7382 1) The owner or operator of a waste pile that does not comply with the liner  
 7383 requirements of Section 724.351(a)(1), and is not exempt from them in  
 7384 accordance with Sections 724.350(c) or 724.351(b), must do the  
 7385 following:  
 7386  
 7387 A) Include in the closure plan for the pile under Section 724.212 both  
 7388 a plan for complying with subsection (a) ~~of this Section~~ and a  
 7389 contingent plan for complying with subsection (b) ~~of this Section~~  
 7390 in case not all contaminated subsoils can be practicably removed at  
 7391 closure; and  
 7392  
 7393 B) Prepare a contingent post-closure plan under Section 724.218 for  
 7394 complying with subsection (b) ~~of this Section~~ in case not all  
 7395 contaminated subsoils can be practicably removed at closure.  
 7396  
 7397 2) The cost estimates calculated under Sections 724.242 and 724.244 for  
 7398 closure and post-closure care of a pile subject to this subsection (b) must  
 7399 include the cost of complying with the contingent closure plan and the  
 7400 contingent post-closure plan, but are not required to include the cost of  
 7401 expected closure under subsection (a) ~~of this Section~~.  
 7402

7403 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 7404

7405 SUBPART M: LAND TREATMENT  
 7406

7407 **Section 724.372 Treatment Demonstration**  
 7408

- 7409 a) For each waste that will be applied to the treatment zone, the owner or operator  
 7410 must demonstrate, prior to application of the waste, that the hazardous  
 7411 constituents in the waste can be completely degraded, transformed, or  
 7412 immobilized in the treatment zone.  
 7413  
 7414 b) In making this demonstration, the owner or operator may use field tests,  
 7415 laboratory analyses, available data or, in the case of existing units, operating data.  
 7416 If the owner or operator intends to conduct field tests or laboratory analyses in  
 7417 order to make the demonstration required pursuant to subsection (a) ~~of this~~  
 7418 ~~Section~~, it must obtain a treatment or disposal permit pursuant to 35 Ill. Adm.  
 7419 Code 703.230. The Agency must specify in this permit the testing, analytical,  
 7420 design and operating requirements (including the duration of the tests and  
 7421 analyses and, in the case of field tests, the horizontal and vertical dimensions of  
 7422 the treatment zone, monitoring procedures, closure, and clean-up activities)

necessary to meet the requirements in subsection (c) ~~of this Section.~~

- c) Any field test or laboratory analysis conducted in order to make a demonstration pursuant to subsection (a) ~~of this Section~~ must meet the following requirements:
- 1) It must accurately simulate the characteristics and operating conditions for the proposed land treatment unit including the following:
    - A) The characteristics of the waste (including the presence of constituents of Appendix H to 35 Ill. Adm. Code 721);
    - B) The climate in the area;
    - C) The topography of the surrounding area;
    - D) The characteristics of the soil in the treatment zone (including depth); and
    - E) The operating practices to be used at the unit;
  - 2) It must be likely to show that hazardous constituents in the waste to be tested will be completely degraded, transformed or immobilized in the treatment zone of the proposed land treatment unit; and
  - 3) It must be conducted in a manner that adequately protects human health and the environment considering the following:
    - A) The characteristics of the waste to be tested;
    - B) The operating and monitoring measures taken during the course of the test;
    - C) The duration of the test;
    - D) The volume of waste used in the test;
    - E) In the case of field tests, the potential for migration of hazardous constituents to groundwater or surface water.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.373 Design and Operating Requirements**

7466 The Agency must specify in the facility permit how the owner or operator will design, construct,  
 7467 operate, and maintain the land treatment unit in compliance with this Section.

7468  
 7469 a) The owner or operator must design, construct, operate, and maintain the unit to  
 7470 maximize the degradation, transformation, and immobilization of hazardous  
 7471 constituents in the treatment zone. The owner or operator must design, construct,  
 7472 operate, and maintain the unit in accord with all design and operating conditions  
 7473 that were used in the treatment demonstration under Section 724.372. At a  
 7474 minimum, ~~the~~The Agency must specify the following in the facility permit:

- 7475 1) The rate and method of waste application to the treatment zone;
- 7476 2) Measures to control soil pH;
- 7477 3) Measures to enhance microbial or chemical reactions (e.g., fertilization,  
 7478 tilling, etc.); and
- 7479 4) Measures to control the moisture content of the treatment zone.

7480  
 7481 b) The owner or operator must design, construct, operate, and maintain the treatment  
 7482 zone to minimize run-off of hazardous constituents during the active life of the  
 7483 land treatment unit.

7484  
 7485 c) The owner or operator must design, construct, operate, and maintain a run-on  
 7486 control system capable of preventing flow onto the treatment zone during peak  
 7487 discharge from at least a 25-year storm.

7488  
 7489 d) The owner or operator must design, construct, operate, and maintain a run-off  
 7490 management system to collect and control at least the water volume resulting  
 7491 from a 24-hour, 25-year storm.

7492  
 7493 e) Collection and holding facilities (e.g., tanks or basins) associated with run-on and  
 7494 run-off control systems must be emptied or otherwise managed expeditiously after  
 7495 storms to maintain the design capacity of the system.

7496  
 7497 f) If the treatment zone contains particulate matter that may be subject to wind  
 7498 dispersal, the owner or operator must manage the unit to control wind dispersal.

7499  
 7500 g) The owner or operator must inspect the unit weekly and after storms to detect  
 7501 evidence of the following:

- 7502 1) Deterioration, malfunctions, or improper operation of run-on and run-off  
 7503 control systems; and

7504  
 7505  
 7506  
 7507  
 7508

7509  
7510  
7511  
7512  
7513  
7514  
7515  
7516  
7517  
7518  
7519  
7520  
7521  
7522  
7523  
7524  
7525  
7526  
7527  
7528  
7529  
7530  
7531  
7532  
7533  
7534  
7535  
7536  
7537  
7538  
7539  
7540  
7541  
7542  
7543  
7544  
7545  
7546  
7547  
7548  
7549  
7550  
7551

- 2) Improper functioning of wind dispersal control measures.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.376 Food-Chain Crops**

The Agency may allow the growth of food-chain crops in or on the treatment zone only if the owner or operator satisfies the conditions of this Section. The Agency must specify in the facility permit the specific food-chain crops that may be grown.

- a) Food-chain crops grown in the treatment zone.
  - 1) The owner or operator must demonstrate that there is no substantial risk to human health caused by the growth of such crops in or on the treatment zone by demonstrating, prior to the planting of such crops, that the following is true of hazardous constituents other than cadmium:
    - A) They will not be transferred to the food or feed portions of the crop by plant uptake or direct contact, and will not otherwise be ingested by food-chain animals (e.g., by grazing); or
    - B) They will not occur in greater concentrations in or on the food or feed portions of crops grown on the treatment zone than in or on identical portions of the same crops grown on untreated soils under similar conditions in the same region.
  - 2) The owner or operator must make the demonstration required under this subsection (a) prior to the planting of crops at the facility for all constituents identified in Appendix H to 35 Ill. Adm. Code 721 that are reasonably expected to be in or derived from waste placed in or on the treatment zone.
  - 3) In making a demonstration under this subsection (a), the owner or operator may use field tests, greenhouse studies, available data or, in the case of existing units, operating data, and must do the following:
    - A) Base the demonstration on conditions similar to those present in the treatment zone, including soil characteristics (e.g., pH, cation exchange capacity), specific wastes, application rates, application methods, and crops to be grown; and
    - B) Describe the procedures used in conducting any tests, including the

7552 sample selection criteria, sample size, analytical methods, and  
 7553 statistical procedures.

7554  
 7555 4) If the owner or operator intends to conduct field tests or greenhouse  
 7556 studies in order to make the demonstration required under this subsection  
 7557 (a) it must obtain a permit for conducting such activities.

7558  
 7559 b) The owner or operator must comply with the following conditions if cadmium is  
 7560 contained in wastes applied to the treatment zone:

7561  
 7562 1) Limited cadmium application.

7563  
 7564 A) The pH of the waste, and soil mixture must be 6.5 or greater at the  
 7565 time of each waste application, except for waste containing  
 7566 cadmium at concentrations of 2 mg/kg (dry weight) or less;

7567  
 7568 B) The annual application of cadmium from waste must not exceed  
 7569 0.5 kg/ha (0.45 lb/acre) kilograms per hectare (kg/ha) on land used  
 7570 for production of tobacco, leafy vegetables or root crops grown for  
 7571 human consumption. For other food-chain crops, the annual  
 7572 cadmium application rate must not exceed 0.5 kg/ha (0.45  
 7573 lb/acre).the following:

Time period	Annual cadmium application rate (kg/ha)
Present to June 30, 1984	2.0
July 1, 1984 to December 31, 1986	1.25
Beginning January 1, 1987	0.5

7574  
 7575  
 7576 C) The cumulative application of cadmium from waste must not  
 7577 exceed 5 kg/ha if the waste and soil mixture has a pH of less than  
 7578 6.5; and

7579  
 7580 D) If the waste and soil mixture has a pH of 6.5 or greater or is  
 7581 maintained at a pH of 6.5 or greater during crop growth, the  
 7582 cumulative application of cadmium from waste must not exceed: 5  
 7583 kg/ha if soil cation exchange capacity (CEC) is less than 50  
 7584 milliequivalents per kilogram (50 meq/kg); 10 kg/ha if soil CEC is  
 7585 50 to 150 meq/kg; and 20 kg/ha if soil CEC is greater than 150  
 7586 meq/kg; or

7587  
 7588 2) Limited future use of land and crops.

- 7589
- 7590 A) Animal feed must be the only food-chain crop produced;
- 7591
- 7592 B) The pH of the waste and soil mixture must be 6.5 or greater at the
- 7593 time of waste application or at the time the crop is planted,
- 7594 whichever occurs later, and this pH level must be maintained
- 7595 whenever food-chain crops are grown;
- 7596
- 7597 C) There must be an operating plan that demonstrates how the animal
- 7598 feed will be distributed to preclude ingestion by humans. The
- 7599 operating plan must describe the measures to be taken to safeguard
- 7600 against possible health hazards from cadmium entering the food
- 7601 chain, which may result from alternative land uses; and
- 7602
- 7603 D) Future property owners must be notified by a stipulation in the
- 7604 land record or property deed that states that the property has
- 7605 received waste at high cadmium application rates and that food-
- 7606 chain crops must not be grown except in compliance with
- 7607 subsection (b)(2) of this Section.
- 7608

7609 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

7610

7611 **Section 724.378 Unsaturated Zone Monitoring**

7612

7613 An owner or operator subject to this Subpart M must establish an unsaturated zone monitoring

7614 program to carry out the following responsibilities:

- 7615 a) The owner or operator must monitor the soil and soil-pore liquid to determine
- 7616 whether hazardous constituents migrate out of the treatment zone.
- 7617
- 7618
- 7619 1) The Agency must specify the hazardous constituents to be monitored in
- 7620 the facility permit. The hazardous constituents to be monitored are those
- 7621 specified under Section 724.371(b).
- 7622
- 7623 2) The Agency may require monitoring for principal hazardous constituents
- 7624 (PHCs) in lieu of the constituents specified under Section 724.371(b).
- 7625 PHCs are hazardous constituents contained in the wastes to be applied at
- 7626 the unit that are the most difficult to treat, considering the combined
- 7627 effects of degradation, transformation, and immobilization. The Agency
- 7628 must establish PHCs if it finds, based on waste analyses, treatment
- 7629 demonstrations, or other data, that effective degradation transformation or
- 7630 immobilization of the PHCs will assure treatment at least equivalent levels
- 7631 for the other hazardous constituents in the wastes.

7632  
7633  
7634  
7635  
7636  
7637  
7638  
7639  
7640  
7641  
7642  
7643  
7644  
7645  
7646  
7647  
7648  
7649  
7650  
7651  
7652  
7653  
7654  
7655  
7656  
7657  
7658  
7659  
7660  
7661  
7662  
7663  
7664  
7665  
7666  
7667  
7668  
7669  
7670  
7671  
7672  
7673  
7674

- b) The owner or operator must install an unsaturated zone monitoring system that includes soil monitoring using soil cores and soil-pore liquid monitoring using devices such as lysimeters. The unsaturated zone monitoring system must consist of a sufficient number of sampling points at appropriate locations and depths to yield samples that fulfill the following:
  - 1) Represent the quality of background soil-pore liquid quality and the chemical make-up of soil that has not been affected by leakage from the treatment zone; and
  - 2) Indicate the quality of soil-pore liquid and the chemical make-up of the soil below the treatment zone.
  
- c) The owner or operator must establish a background value for each hazardous constituent to be monitored under subsection (a) ~~of this Section~~. The permit will specify the background values for each constituent or specify the procedures to be used to calculate the background values.
  - 1) Background soil values may be based on a one-time sampling at a background plot having characteristics similar to those of the treatment zone.
  - 2) Background soil-pore liquid values must be based on at least quarterly sampling for one year at a background plot having characteristics similar to those of the treatment zone.
  - 3) The owner or operator must express all background values in a form necessary for the determination of statistically significant increases under subsection (f) ~~of this Section~~.
  - 4) In taking samples used in the determination of all background values, the owner or operator must use an unsaturated zone monitoring system that complies with subsection (b)(1) ~~of this Section~~.
  
- d) The owner or operator must conduct soil monitoring and soil-pore liquid monitoring immediately below the treatment zone. The Agency must specify the frequency and timing of soil and soil-pore liquid monitoring in the facility permit after considering the frequency, timing, and rate of waste application and the soil permeability. The owner or operator must express the results of soil and soil-pore liquid monitoring in a form necessary for the determination of statistically significant increases under subsection (f) ~~of this Section~~.

- 7675 e) The owner or operator must use consistent sampling and analysis procedures that  
7676 are designed to ensure sampling results that provide a reliable indication of soil-  
7677 pore liquid quality and the chemical make-up of the soil below the treatment zone.  
7678 At a minimum, the owner or operator must implement procedures and techniques  
7679 for the following:
- 7680 1) Sample collection;
  - 7681 2) Sample preservation and shipment;
  - 7682 3) Analytical procedures; and
  - 7683 4) Chain of custody control.
- 7684
- 7685 f) The owner or operator must determine whether there is a statistically significant  
7686 change over background values for any hazardous constituent to be monitored  
7687 under subsection (a) of this Section below the treatment zone each time it  
7688 conducts soil monitoring and soil-pore liquid monitoring under subsection (d) of  
7689 this Section.
- 7690 1) In determining whether a statistically significant increase has occurred, the  
7691 owner or operator must compare the value of each constituent, as  
7692 determined under subsection (d) of this Section, to the background value  
7693 for that constituent according to the statistical procedure specified in the  
7694 facility permit under this subsection (f).
  - 7695 2) The owner or operator must determine whether there has been a  
7696 statistically significant increase below the treatment zone within a  
7697 reasonable time period after completion of sampling. The Agency must  
7698 specify that time period in the facility permit after considering the  
7699 complexity of the statistical test and the availability of laboratory facilities  
7700 to perform the analysis of soil and soil-pore liquid samples.
  - 7701 3) The owner or operator must determine whether there is a statistically  
7702 significant increase below the treatment zone using a statistical procedure  
7703 that provides reasonable confidence that migration from the treatment  
7704 zone will be identified. The Agency must specify a statistical procedure in  
7705 the facility permit that it finds fulfills the following:
    - 7706 A) Is appropriate for the distribution of the data used to establish  
7707 background values; and
    - 7708 B) Provides a reasonable balance between the probability of falsely  
7709
- 7710
- 7711
- 7712
- 7713
- 7714
- 7715
- 7716
- 7717

7718 identifying migration from the treatment zone and the probability  
7719 of failing to identify real migration from the treatment zone.

7720  
7721 g) If the owner or operator determines, pursuant to subsection (f) ~~of this Section~~, that  
7722 there is a statistically significant increase of hazardous constituents below the  
7723 treatment zone, it must do the following:

7724  
7725 1) Notify the Agency of this finding in writing within seven days. The  
7726 notification must indicate what constituents have shown statistically  
7727 significant increases.

7728  
7729 2) Within 90 days, submit to the Agency an application for a permit  
7730 modification to modify the operating practices at the facility in order to  
7731 maximize the success of degradation, transformation, or immobilization  
7732 processes in the treatment zone.

7733  
7734 h) If the owner or operator determines, pursuant to subsection (f) ~~of this Section~~, that  
7735 there is a statistically significant increase of hazardous constituents below the  
7736 treatment zone, it may demonstrate that a source other than regulated units caused  
7737 the increase or that the increase resulted from an error in sampling, analysis or  
7738 evaluation. While the owner or operator may make a demonstration under this  
7739 subsection (h) in addition to, or in lieu of, submitting a permit modification  
7740 application under subsection (g)(2) ~~of this Section~~, it is not relieved of the  
7741 requirement to submit a permit modification application within the time specified  
7742 in subsection (g)(2) ~~of this Section~~, unless the demonstration made under this  
7743 subsection (h) successfully shows that a source other than regulated units caused  
7744 the increase or that the increase resulted from an error in sampling, analysis, or  
7745 evaluation. In making a demonstration under this subsection (h), the owner or  
7746 operator must do the following:

7747  
7748 1) Notify the Agency in writing within seven days of determining a  
7749 statistically significant increase below the treatment zone that the owner or  
7750 operator intends to make a determination under this subsection (h);

7751  
7752 2) Within 90 days, submit a report to the Agency demonstrating that a source  
7753 other than the regulated units caused the increase or that the increase  
7754 resulted from error in sampling, analysis, or evaluation;

7755  
7756 3) Within 90 days, submit to the Agency an application for a permit  
7757 modification to make any appropriate changes to the unsaturated zone  
7758 monitoring program at the facility; and

7759  
7760 4) Continue to monitor in accordance with the unsaturated zone monitoring

7761 program established under this Section.  
7762

7763 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
7764

7765 **Section 724.380 Closure and Post-Closure Care**  
7766

- 7767 a) During the closure period the owner or operator must do the following:  
7768
- 7769 1) It must continue all operations (including pH control) necessary to  
7770 maximize degradation, transformation or immobilization of hazardous  
7771 constituents within the treatment zone as required under Section  
7772 724.373(a), except to the extent such measures are inconsistent with  
7773 subsection (a)(8) of this Section;  
7774
  - 7775 2) It must continue all operations in the treatment zone to minimize run-off  
7776 of hazardous constituents, as required under Section 724.373(b);  
7777
  - 7778 3) It must maintain the run-on control system required under Section  
7779 724.373(c);  
7780
  - 7781 4) It must maintain the run-off management system required under Section  
7782 724.373(d);  
7783
  - 7784 5) It must control wind dispersal of hazardous waste if required under  
7785 Section 724.373(f);  
7786
  - 7787 6) It must continue to comply with any prohibitions or conditions concerning  
7788 growth of food-chain crops under Section 724.376;  
7789
  - 7790 7) It must continue unsaturated zone monitoring in compliance with Section  
7791 724.378, except that soil-pore liquid monitoring may be terminated 90  
7792 days after the last application of waste to the treatment zone; and  
7793
  - 7794 8) It must establish a vegetative cover on the portion of the facility being  
7795 closed at such time that the cover will not substantially impede  
7796 degradation, transformation, or immobilization of hazardous constituents  
7797 in the treatment zone. The vegetative cover must be capable of  
7798 maintaining growth without extensive maintenance.  
7799
- 7800 b) For the purpose of complying with Section 724.215, when closure is completed  
7801 the owner or operator may submit to the Agency certification by an independent  
7802 qualified soil scientist, in lieu of a qualified Professional Engineer, that the facility  
7803 has been closed in accordance with the specifications in the approved closure

- 7804 plan.  
 7805  
 7806 c) During the post-closure care period the owner or operator must do the following:  
 7807  
 7808 1) It must continue all operations (including pH control) necessary to  
 7809 enhance degradation and transformation and sustain immobilization of  
 7810 hazardous constituents in the treatment zone to the extent that such  
 7811 measures are consistent with other post-closure care activities;  
 7812  
 7813 2) It must maintain a vegetative cover over closed portions of the facility;  
 7814  
 7815 3) It must maintain the run-on control system required under Section  
 7816 724.373(c);  
 7817  
 7818 4) It must maintain the run-off management system required under Section  
 7819 724.373(d);  
 7820  
 7821 5) It must control wind dispersal of hazardous waste if required under  
 7822 Section 724.373(f);  
 7823  
 7824 6) It must continue to comply with any prohibitions or conditions concerning  
 7825 growth of food-chain crops under Section 724.376; and  
 7826  
 7827 7) It must continue unsaturated zone monitoring in compliance with Section  
 7828 724.378, except that soil-pore liquid monitoring may be terminated 90  
 7829 days after the last application of waste to the treatment zone.  
 7830  
 7831 d) The owner or operator is not subject to regulation under subsections (a)(8) and (c)  
 7832 of this Section if the Agency finds that the level of hazardous constituents in the  
 7833 treatment zone soil does not exceed the background value of those constituents by  
 7834 an amount that is statistically significant when using the test specified in  
 7835 subsection (d)(3) of this Section. The owner or operator may submit such a  
 7836 demonstration to the Agency at any time during the closure or post-closure care  
 7837 periods. For the purposes of this subsection (d), the owner or operator must do  
 7838 the following:  
 7839  
 7840 1) The owner or operator must establish background soil values and  
 7841 determine whether there is a statistically significant increase over those  
 7842 values for all hazardous constituents specified in the facility permit under  
 7843 Section 724.371.  
 7844  
 7845 A) Background soil values may be based on a one-time sampling of a  
 7846 background plot having characteristics similar to those of the

7847 treatment zone.

7848  
7849 B) The owner or operator must express background values and values  
7850 for hazardous constituents in the treatment zone in a form  
7851 necessary for the determination of statistically significant increases  
7852 under subsection (d)(3) of this Section.

7853  
7854 2) In taking samples used in the determination of background and treatment  
7855 zone values, the owner or operator must take samples at a sufficient  
7856 number of sampling points and at appropriate locations and depths to yield  
7857 samples that represent the chemical make-up of soil that has not been  
7858 affected by leakage from the treatment zone and the soil within the  
7859 treatment zone, respectively.

7860  
7861 3) In determining whether a statistically significant increase has occurred, the  
7862 owner or operator must compare the value of each constituent in the  
7863 treatment zone to the background value for that constituent using a  
7864 statistical procedure that provides reasonable confidence that constituent  
7865 presence in the treatment zone will be identified. The owner or operator  
7866 must use a statistical procedure that does the following:

7867  
7868 A) It is appropriate for the distribution of the data used to establish  
7869 background values; and

7870  
7871 B) It provides a reasonable balance between the probability of falsely  
7872 identifying hazardous constituent presence in the treatment zone  
7873 and the probability of failing to identify real presence in the  
7874 treatment zone.

7875  
7876 e) The owner or operator is not subject to regulation under Subpart F of this Part if  
7877 the Agency finds that the owner or operator satisfies subsection (d) of this Section  
7878 and if unsaturated zone monitoring under Section 724.378 indicates that  
7879 hazardous constituents have not migrated beyond the treatment zone during the  
7880 active life of the land treatment unit.

7881  
7882 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

7883  
7884 **Section 724.382 Special Requirements for Incompatible Wastes**

7885  
7886 The owner or operator must not place incompatible wastes, or incompatible wastes and materials  
7887 (see Appendix E of this Part for examples), in or on the same treatment zone, unless Section  
7888 724.117(b) is complied with.

7889

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART N: LANDFILLS

**Section 724.401 Design and Operating Requirements**

- a) Any landfill that is not covered by subsection (c) of this Section or 35 Ill. Adm. Code 725.401(a) must have a liner system for all portions of the landfill (except for existing portions of such landfill). The liner system must have the following:
  - 1) A liner that is designed, constructed, and installed to prevent any migration of wastes out of the landfill to the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the landfill. The liner must be constructed of materials that prevent wastes from passing into the liner 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 leachate to which they are exposed, climatic conditions, the stress of installation and the stress of daily operation;
    - 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 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 landfill. 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 fulfill the following:
    - A) Constructed of materials that fulfill the following:
      - i) Chemically resistant to the waste managed in the landfill and the leachate expected to be generated; and

- 7933  
7934  
7935  
7936  
7937  
7938  
7939  
7940  
7941  
7942  
7943  
7944  
7945  
7946  
7947  
7948  
7949  
7950  
7951  
7952  
7953  
7954  
7955  
7956  
7957  
7958  
7959  
7960  
7961  
7962  
7963  
7964  
7965  
7966  
7967  
7968  
7969  
7970  
7971  
7972  
7973  
7974  
7975
- ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying wastes, waste cover materials, and any equipment used at the landfill; and
  - B) Designed and operated to function without clogging through the scheduled closure of the landfill.
  - 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 landfill 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 landfill unit on which construction commences after January 29, 1992, each lateral expansion of a landfill unit on which construction commenced after July 29, 1992, and each replacement of an existing landfill unit that was to commence 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 35 Ill. Adm. Code 720.110 under "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

- 7976 constituents into such liner during the active life and post-  
7977 closure care period; and  
7978  
7979 ii) A composite bottom liner, consisting of at least two  
7980 components. The upper component must be designed and  
7981 constructed of materials (e.g., a geomembrane) to prevent  
7982 the migration of hazardous constituents into this component  
7983 during the active life and post-closure care period. The  
7984 lower component must be designed and constructed of  
7985 materials to minimize the migration of hazardous  
7986 constituents if a breach in the upper component were to  
7987 occur. The lower component must be constructed of at  
7988 least 3 feet (91 cm) of compacted soil material with a  
7989 hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec.  
7990  
7991 B) The liners must comply with subsections (a)(1)(A), (a)(1)(B), and  
7992 (a)(1)(C) of this Section.  
7993  
7994 2) The leachate collection and removal system immediately above the top  
7995 liner must be designed, constructed, operated, and maintained to collect  
7996 and remove leachate from the landfill during the active life and post-  
7997 closure care period. The Agency must specify design and operating  
7998 conditions in the permit to ensure that the leachate depth over the liner  
7999 does not exceed 30 cm (one foot). The leachate collection and removal  
8000 system must comply with subsections (c)(3)(C) and (c)(3)(D) of this  
8001 Section.  
8002  
8003 3) The leachate collection and removal system between the liners, and  
8004 immediately above the bottom composite liner in the case of multiple  
8005 leachate collection and removal systems, is also a leak detection system  
8006 (LDS). This LDS must be capable of detecting, collecting, and removing  
8007 leaks of hazardous constituents at the earliest practicable time through all  
8008 areas of the top liner likely to be exposed to waste or leachate during the  
8009 active life and post-closure care period. The requirements for a LDS in  
8010 this subsection (c) are satisfied by installation of a system that, at a  
8011 minimum, fulfills the following:  
8012  
8013 A) It is constructed with a bottom slope of one percent or more;  
8014  
8015 B) It is constructed of granular drainage materials with a hydraulic  
8016 conductivity of  $1 \times 10^{-2}$  cm/sec or more and a thickness of 12 inches  
8017 (30.5 cm) or more; or constructed of synthetic or geonet drainage  
8018 materials with a transmissivity of  $3 \times 10^{-5}$  m<sup>2</sup>/sec or more;

- 8019  
8020  
8021  
8022  
8023  
8024  
8025  
8026  
8027  
8028  
8029  
8030  
8031  
8032  
8033  
8034  
8035  
8036  
8037  
8038  
8039  
8040  
8041  
8042  
8043  
8044  
8045  
8046  
8047  
8048  
8049  
8050  
8051  
8052  
8053  
8054  
8055  
8056  
8057  
8058  
8059  
8060  
8061
- C) It is constructed of materials that are chemically resistant to the waste managed in the landfill 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 landfill;
  - 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.
- 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 ground water.
- d) Subsection (c) ~~of this Section~~ will not apply if the owner or operator demonstrates to the Agency, and the Agency finds for such landfill, 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 systems, 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 Agency must not require a double liner as set forth in subsection (c) ~~of this Section~~ for any monofill, if the following is true:
    - 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 render the wastes hazardous for reasons other

- 8062 than the toxicity characteristics in 35 Ill. Adm. Code 721.124, with  
8063 USEPA hazardous waste numbers D004 through D017; and  
8064  
8065 2) No migration demonstration.  
8066  
8067 A) Design and location requirements.  
8068  
8069 i) The monofill has at least one liner for which there is no  
8070 evidence that such liner is leaking;  
8071  
8072 ii) The monofill is located more than one-quarter mile from an  
8073 underground source of drinking water (as that term is  
8074 defined in 35 Ill. Adm. Code 702.110; and  
8075  
8076 iii) The monofill is in compliance with generally applicable  
8077 groundwater monitoring requirements for facilities with  
8078 RCRA permits; or  
8079  
8080 B) The owner or operator demonstrates to the Board that the monofill  
8081 is located, designed, and operated so as to assure that there will be  
8082 no migration of any hazardous constituent into groundwater or  
8083 surface water at any future time.  
8084  
8085 f) The owner or operator of any replacement landfill unit is exempt from subsection  
8086 (c) of this Section if the following is true:  
8087  
8088 1) The existing unit was constructed in compliance with the design standards  
8089 of 35 Ill. Adm. Code 724.401(c), (d), and (e); and  
8090  
8091 BOARD NOTE: The cited subsections implemented the design standards  
8092 of sections 3004(o)(1)(A)(i) and (o)(5) of the Resource Conservation and  
8093 Recovery Act (42 USC ~~U.S.C.6924(o)(1)(A)(i) and (o)(5)-6901~~ et seq.).  
8094  
8095 2) There is no reason to believe that the liner is not functioning as designed.  
8096  
8097 g) The owner or operator must design, construct, operate, and maintain a run-on  
8098 control system capable of preventing flow onto the active portion of the landfill  
8099 during peak discharge from at least a 25-year storm.  
8100  
8101 h) The owner or operator must design, construct, operate, and maintain a run-off  
8102 management system to collect and control at least the water volume resulting  
8103 from a 24-hour, 25-year storm.  
8104

- 8105 i) Collection and holding facilities (e.g., tanks or basins) associated with run-on and  
8106 run-off control systems must be emptied or otherwise managed expeditiously after  
8107 storms to maintain design capacity of the system.  
8108
- 8109 j) If the landfill contains any particulate matter that may be subject to wind  
8110 dispersal, the owner or operator must cover or otherwise manage the landfill to  
8111 control wind dispersal.  
8112
- 8113 k) The Agency must specify in the permit all design and operating practices that are  
8114 necessary to ensure that the requirements of this Section are satisfied.  
8115

8116 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
8117

8118 **Section 724.404 Response Actions**  
8119

- 8120 a) The owner or operator of landfill units subject to Section 724.401(c) or (d) must  
8121 have an approved response action plan before receipt of waste. The response  
8122 action plan must set forth the actions to be taken if the action leakage rate has  
8123 been exceeded. At a minimum, the response action plan must describe the actions  
8124 specified in subsection (b) of this Section.  
8125
- 8126 b) If the flow rate into the LDS exceeds the action leakage rate for any sump, the  
8127 owner or operator must do the following :  
8128
  - 8129 1) Notify the Agency in writing of the exceedance within seven days of the  
8130 determination;
  - 8131
  - 8132 2) Submit a preliminary written assessment to the Agency within 14 days of  
8133 the determination, as to the amount of liquids, likely sources of liquids,  
8134 possible location, size, and cause of any leaks, and short-term actions  
8135 taken and planned;
  - 8136
  - 8137 3) Determine to the extent practicable the location, size, and cause of any  
8138 leak;
  - 8139
  - 8140 4) Determine whether waste receipt should cease or be curtailed, whether any  
8141 waste should be removed from the unit for inspection, repairs, or controls,  
8142 and whether the unit should be closed;
  - 8143
  - 8144 5) Determine any other short-term and longer-term actions to be taken to  
8145 mitigate or stop any leaks; and  
8146
  - 8147 6) Within 30 days after the notification that the action leakage rate has been

8148 exceeded, submit to the Agency the results of the determinations specified  
 8149 in subsections (b)(3), (b)(4), and (b)(5) of this Section, the results of  
 8150 actions taken, and actions planned. Monthly thereafter, as long as the flow  
 8151 rate in the LDS exceeds the action leakage rate, the owner or operator  
 8152 must submit to the Agency a report summarizing the results of any  
 8153 remedial actions taken and actions planned.  
 8154

- 8155 c) To make the leak or remediation determinations in subsections (b)(3), (b)(4), and  
 8156 (b)(5) of this Section, the owner or operator must do either of the following:  
 8157
- 8158 1) Perform the following assessments:  
 8159
  - 8160 A) Assess the source of liquids and amounts of liquids by source;  
 8161
  - 8162 B) Conduct a fingerprint, hazardous constituent, or other analyses of  
 8163 the liquids in the LDS to identify the source of liquids and possible  
 8164 location of any leaks and the hazard and mobility of the liquid; and  
 8165
  - 8166 C) Assess the seriousness of any leaks in terms of potential for  
 8167 escaping into the environment; or  
 8168
  - 8169 2) Document why such assessments are not needed.  
 8170

8171 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 8172

8173 **Section 724.410 Closure and Post-Closure Care**  
 8174

- 8175 a) At final closure of the landfill or upon closure of any cell, the owner or operator  
 8176 must cover the landfill or cell with a final cover designed and constructed to do  
 8177 the following:  
 8178
- 8179 1) Provide long-term minimization of migration of liquids through the closed  
 8180 landfill;  
 8181
  - 8182 2) Function with minimum maintenance;  
 8183
  - 8184 3) Promote drainage and minimize erosion or abrasion of the cover;  
 8185
  - 8186 4) Accommodate settling and subsidence so that the cover's integrity is  
 8187 maintained; and  
 8188
  - 8189 5) Have a permeability less than or equal to the permeability of any bottom  
 8190 liner system or natural subsoils present.

- 8191  
8192 b) After final closure, the owner or operator must comply with all post-closure  
8193 requirements contained in Sections 724.217 through 724.220, including  
8194 maintenance and monitoring throughout the post-closure care period (specified in  
8195 the permit under Section 724.217). The owner or operator must do the following:  
8196  
8197 1) Maintain the integrity and effectiveness of the final cover, including  
8198 making repairs to the cap as necessary to correct the effects of settling,  
8199 subsidence, erosion, or other events;  
8200  
8201 2) Continue to operate the leachate collection and removal system until  
8202 leachate is no longer detected;  
8203  
8204 3) Maintain and monitor the LDS in accordance with Sections  
8205 724.401(c)(3)(D) and (c)(4) and 724.403(c), and comply with all other  
8206 applicable LDS requirements of this Part;  
8207  
8208 4) Maintain and monitor the groundwater monitoring system and comply  
8209 with all other applicable requirements of Subpart F of this Part;  
8210  
8211 5) Prevent run-on and run-off from eroding or otherwise damaging the final  
8212 cover; and  
8213  
8214 6) Protect and maintain surveyed benchmarks used in complying with  
8215 Section 724.409.

8216  
8217 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
8218

8219 **Section 724.412 Special Requirements for Ignitable or Reactive Waste**  
8220

- 8221 a) Except as provided in subsection (b) of this Section and in Section 724.416,  
8222 ignitable or reactive waste must not be placed in a landfill, unless the waste and  
8223 landfill meet all applicable requirements of 35 Ill. Adm. Code 728, and the waste  
8224 is treated, rendered, or mixed before or immediately after placement in a landfill  
8225 so that the following is true:  
8226  
8227 1) The resulting waste, mixture, or dissolution of material no longer meets  
8228 the definition of ignitable or reactive waste under 35 Ill. Adm. Code  
8229 721.121 or 721.123; and  
8230  
8231 2) Section 724.117(b) is complied with.  
8232  
8233 b) Except for prohibited wastes that remain subject to treatment standards in Subpart

8234 D to 35 Ill. Adm. Code 728, ignitable waste in containers may be landfilled  
8235 without meeting the requirements of subsection (a) of this Section provided that  
8236 the wastes are disposed of in such a way that they are protected from any material  
8237 or conditions that may cause them to ignite. At a minimum, ignitable wastes must  
8238 be disposed of in non-leaking containers that are carefully handled and placed so  
8239 as to avoid heat, sparks, rupture, or any other condition that might cause ignition  
8240 of the wastes; must be covered daily with soil or other non-combustible material  
8241 to minimize the potential for ignition of the wastes; and must not be disposed of  
8242 in cells that contain or will contain other wastes that may generate heat sufficient  
8243 to cause ignition of the waste.  
8244

8245 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
8246

8247 **Section 724.413 Special Requirements for Incompatible Wastes**  
8248

8249 Incompatible wastes or incompatible wastes and materials (see Appendix E of this Part for  
8250 examples) must not be placed in the same landfill cell, unless Section 724.117(b) is complied  
8251 with.  
8252

8253 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
8254

8255 **Section 724.414 Special Requirements for Bulk and Containerized Liquids**  
8256

- 8257 a) The placement of bulk or non-containerized liquid hazardous waste or hazardous  
8258 waste containing free liquids (whether or not sorbents have been added) in any  
8259 landfill is prohibited.  
8260
- 8261 b) To demonstrate the absence or presence of free liquids in either a containerized or  
8262 a bulk waste, the following test must be used: Method 9095B (Paint Filter  
8263 Liquids Test), as described in "Test Methods for Evaluating Solid Wastes,  
8264 Physical/Chemical Methods," USEPA publication number EPA-530/SW-846,  
8265 incorporated by reference in 35 Ill. Adm. Code 720.111(a).  
8266
- 8267 c) Containers holding free liquids must not be placed in a landfill unless the  
8268 following is true:  
8269
- 8270 1) All free-standing liquid fulfills one of the following:  
8271
- 8272 A) It has been removed by decanting or other methods;  
8273
- 8274 B) It has been mixed with sorbent or solidified so that free-standing  
8275 liquid is no longer observed; or  
8276

- 8277 C) It has been otherwise eliminated; or  
8278  
8279 2) The container is very small, such as an ampule; or  
8280  
8281 3) The container is designed to hold free liquids for use other than storage,  
8282 such as a battery or capacitor; or  
8283  
8284 4) The container is a lab pack, as defined in Section 724.416, and is disposed  
8285 of in accordance with Section 724.416.  
8286
- 8287 d) Sorbents used to treat free liquids to be disposed of in landfills must be  
8288 nonbiodegradable. Nonbiodegradable sorbents are the following: materials listed  
8289 or described in subsection (d)(1); materials that pass one of the tests in subsection  
8290 (d)(2); or materials that are determined by the Board to be nonbiodegradable  
8291 through the adjusted standard procedure of 35 Ill. Adm. Code 104.  
8292
- 8293 1) Nonbiodegradable sorbents are the following:  
8294
- 8295 A) Inorganic minerals, other inorganic materials, and elemental  
8296 carbon (e.g., aluminosilicates (clays, smectites, Fuller's earth,  
8297 bentonite, calcium bentonite, montmorillonite, calcined  
8298 montmorillonite, kaolinite, micas (illite), vermiculites, zeolites,  
8299 etc.), calcium carbonate (organic free limestone),  
8300 oxides/hydroxides (alumina, lime, silica (sand), diatomaceous  
8301 earth, etc.), perlite (volcanic glass), expanded volcanic rock,  
8302 volcanic ash, cement kiln dust, fly ash, rice hull ash, activated  
8303 charcoal (activated carbon), etc.); or  
8304
- 8305 B) High molecular weight synthetic polymers (e.g., polyethylene,  
8306 high density polyethylene (HDPE), polypropylene, polystyrene,  
8307 polyurethane, polyacrylate, polynorborene, polyisobutylene,  
8308 ground synthetic rubber, cross-linked allylstrene and tertiary butyl  
8309 copolymers, etc.). This does not include polymers derived from  
8310 biological material or polymers specifically designed to be  
8311 degradable; or  
8312
- 8313 C) Mixtures of these nonbiodegradable materials.  
8314
- 8315 2) Tests for nonbiodegradable sorbents are the following:  
8316
- 8317 A) The sorbent material is determined to be nonbiodegradable under  
8318 ASTM Method G21-70 (1984a) (Standard Practice for  
8319 Determining Resistance of Synthetic Polymer Materials to Fungi),

8320 incorporated by reference in 35 Ill. Adm. Code 720.111(a);

8321

8322

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

8323

8324

8325

8326

8327

C) The sorbent material is determined to be non-biodegradable under OECD Guideline for Testing of Chemicals, Method 301B (CO<sub>2</sub> Evolution (Modified Sturm Test)), incorporated by reference in 35 Ill. Adm. Code 720.111(a).

8328

8329

8330

8331

e) 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:

8332

8333

8334

8335

8336

8337

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

8338

8339

8340

8341

8342

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).

8343

8344

8345

8346

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

8347

8348

**Section 724.416 Disposal of Small Containers of Hazardous Waste in Overpacked Drums (Lab Packs)**

8349

8350

8351

Small containers of hazardous waste in overpacked drums (lab packs) may be placed in a landfill if the following requirements are met:

8352

8353

8354

a) Hazardous waste must be packaged in non-leaking inside containers. The inside containers must be of a design and constructed of a material that will not react dangerously with, be decomposed by, or be ignited by the contained waste. The inside containers must be tightly and securely sealed. The inside containers must be of the size and type specified in the USDOT hazardous materials regulations (49 CFR 173 (Shippers – General Requirements for Shipments and Packages), 178 (Specifications for Packagings), and 179 (Specifications for Tank Cars), each incorporated by reference in 35 Ill. Adm. Code 720.111(b)), if those regulations

8355

8356

8357

8358

8359

8360

8361

8362

8363  
8364  
8365  
8366  
8367  
8368  
8369  
8370  
8371  
8372  
8373  
8374  
8375  
8376  
8377  
8378  
8379  
8380  
8381  
8382  
8383  
8384  
8385  
8386  
8387  
8388  
8389  
8390  
8391  
8392  
8393  
8394  
8395  
8396  
8397  
8398  
8399  
8400  
8401  
8402  
8403  
8404  
8405

specify a particular inside container for the waste.

- b) The inside containers must be overpacked in an open head USDOT-specification metal shipping container (49 CFR 178 (Specifications for Packagings) and 179 (Specifications for Tank Cars)) of no more than 416 ~~liter~~ (110 gallon) capacity and surrounded by, at a minimum, a sufficient quantity of sorbent material, determined to be nonbiodegradable in accordance with Section 724.414(d), to completely sorb all of the liquid contents of the inside containers. The metal outer container must be full after packing with inside containers and sorbent material.
- c) In accordance with Section 724.117(b), the sorbent material used must not be capable of reacting dangerously with, being decomposed by, or being ignited by the contents of the inside containers, in accordance with Section 724.117(b).
- d) Incompatible waste, as defined in 35 Ill. Adm. Code 720.110, must not be placed in the same outside container.
- e) Reactive wastes, other than cyanide- or sulfide-bearing waste as defined in 35 Ill. Adm. Code 721.123(a)(5), must be treated or rendered non-reactive prior to packaging in accordance with subsections (a) through (d) ~~of this Section~~. Cyanide- and sulfide-bearing reactive waste may be packed in accordance with subsections (a) through (d) ~~of this Section~~ without first being treated or rendered non-reactive.
- f) Such disposal is in compliance with 35 Ill. Adm. Code 728. Persons who incinerate lab packs according to 35 Ill. Adm. Code 728.142(c)(1) may use fiber drums in place of metal outer containers. Such fiber drums must meet the USDOT specifications in 49 CFR 173.12 (Exceptions for Shipments of Waste Materials), incorporated by reference in 35 Ill. Adm. Code 720.111(b), and be overpacked according to the requirements of subsection (b) ~~of this Section~~.
- g) Pursuant to 35 Ill. Adm. Code 729.312, the use of labpacks for disposal of liquid wastes or wastes containing free liquids allowed under this Section is restricted to labwaste and non-periodic waste, as those terms are defined in that Part.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART O: INCINERATORS

**Section 724.440 Applicability**

- a) The regulations in this Subpart O apply to owners and operators of hazardous

8406 waste incinerators (as defined in 35 Ill. Adm. Code 720.110), except as Section  
8407 724.101 provides otherwise.

8408  
8409 b) Integration of the MACT standards.

- 8410  
8411 1) Except as provided by subsections (b)(2) through (b)(4) ~~of this Section,~~  
8412 the standards of this Part do not apply to a new hazardous waste  
8413 incineration unit that became subject to RCRA permit requirements after  
8414 October 12, 2005; or no longer apply when the owner or operator of an  
8415 existing hazardous waste incineration unit demonstrates compliance with  
8416 the maximum achievable control technology (MACT) requirements of  
8417 subpart EEE of 40 CFR 63 (National Emission Standards for Hazardous  
8418 Air Pollutants from Hazardous Waste Combustors), incorporated by  
8419 reference in 35 Ill. Adm. Code 720.111(b), by conducting a  
8420 comprehensive performance test and submitting to the Agency a  
8421 Notification of Compliance, pursuant to 40 CFR 63.1207(j)  
8422 and 63.1210(d), documenting compliance with the requirements of subpart  
8423 EEE of 40 CFR 63.  
8424
- 8425 2) The MACT standards of subpart EEE of 40 CFR 63 do not replace the  
8426 closure requirements of Section 724.451 or the applicable requirements of  
8427 Subparts A through H, BB, and CC ~~of this Part.~~  
8428
- 8429 3) The particulate matter standard of Section 724.443(c) remains in effect for  
8430 incinerators that elect to comply with the alternative to the particulate  
8431 matter standard of 40 CFR 63.1206(b)(14) and 63.1219(e) (When and  
8432 How Must You Comply with the Standards and Operating  
8433 Requirements?), incorporated by reference in 35 Ill. Adm. Code  
8434 720.111(b).  
8435
- 8436 4) The following requirements remain in effect for startup, shutdown, and  
8437 malfunction events if the owner or operator elects to comply with 35 Ill.  
8438 Adm. Code 703.320(a)(1)(A) to minimize emissions of toxic compounds  
8439 from the following events:  
8440
- 8441 A) Section 724.445(a), requiring that an incinerator operate in  
8442 accordance with operating requirements specified in the permit;  
8443 and  
8444
- 8445 B) Section 724.445(c), requiring compliance with the emission  
8446 standards and operating requirements during startup and shutdown  
8447 if hazardous waste is in the combustion chamber, except for  
8448 particular hazardous wastes.

8449  
8450 BOARD NOTE: Sections 9.1 and 39.5 of the Environmental Protection  
8451 Act [~~415 ILCS 5/9.1 and 39.5~~] make the federal MACT standards directly  
8452 applicable to entities in Illinois and authorize the Agency to issue permits  
8453 based on the federal standards. Operating conditions used to determine  
8454 effective treatment of hazardous waste remain effective after the owner or  
8455 operator demonstrates compliance with the standards of subpart EEE of 40  
8456 CFR 63. In adopting this subsection (b), USEPA stated as follows (at 64  
8457 Fed Reg. 52828, 52975 (September 30, 1999)):  
8458

8459 Under this approach . . . , MACT air emissions and related  
8460 operating requirements are to be included in Title V permits;  
8461 RCRA permits will continue to be required for all other aspects of  
8462 the combustion unit and the facility that are governed by RCRA  
8463 (e.g., corrective action, general facility standards, other combustor-  
8464 specific concerns such as materials handling, risk-based emissions  
8465 limits and operating requirements, as appropriate, and other  
8466 hazardous waste management units).  
8467

8468 c) After consideration of the waste analysis included with Part B of the permit  
8469 application, the Agency, in establishing the permit conditions, must exempt the  
8470 applicant from all requirements of this Subpart O, except Section 724.441 (Waste  
8471 Analysis) and Section 724.451 (Closure):  
8472

8473 1) If the Agency finds that the waste to be burned is one of the following:  
8474

8475 A) It is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code  
8476 721 solely because it is ignitable (Hazard Code I), corrosive  
8477 (Hazard Code C), or both;  
8478

8479 B) It is listed as a hazardous waste in Subpart D of 35 Ill. Adm. Code  
8480 721 solely because it is reactive (Hazard Code R) for  
8481 characteristics other than those listed in Section 721.123(a)(4) and  
8482 (5), and will not be burned when other hazardous wastes are  
8483 present in the combustion zone;  
8484

8485 C) It is a hazardous waste solely because it possesses the  
8486 characteristic of ignitability, as determined by the test for  
8487 characteristics of hazardous wastes pursuant to Subpart C of 35 Ill.  
8488 Adm. Code 721; or  
8489

8490 D) It is a hazardous waste solely because it possesses any of the  
8491 reactivity characteristics described by 35 Ill. Adm. Code

721.123(a)(1), (a)(2), (a)(3), (a)(6), (a)(7), and (a)(8) and will not be burned when other hazardous wastes are present in the combustion zone; and

2) If the waste analysis shows that the waste contains none of the hazardous constituents listed in Subpart H of 35 Ill. Adm. Code 721 that would reasonably be expected to be in the waste.

d) If the waste to be burned is one that is described by subsection (b)(1)(A), (b)(1)(B), (b)(1)(C), or (b)(1)(D) of this Section and contains insignificant concentrations of the hazardous constituents listed in Subpart H of 35 Ill. Adm. Code 721, then the Agency may, in establishing permit conditions, exempt the applicant from all requirements of this Subpart O, except Section 724.441 (Waste Analysis) and Section 724.451 (Closure), after consideration of the waste analysis included with Part B of the permit application, unless the Agency finds that the waste will pose a threat to human health or the environment when burned in an incinerator.

e) The owner or operator of an incinerator may conduct trial burns subject only to the requirements of 35 Ill. Adm. Code 703.222 through 703.225 (short-term and incinerator permits).

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**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:

$$DRE = \frac{100 \times (N - O)}{N}$$

Where:

8534

- 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

8535

8536

8537

8538

8539

8540

8541

8542

8543

8544

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.

8545

8546

8547

8548

8549

8550

b) An incinerator burning hazardous waste and producing stack emissions of more than 1.8 ~~kg (4 lbs)~~ 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 ~~kg (4 lbs)~~ kilograms per hour or one percent of the HCl in the stack gas prior to entering any pollution control equipment.

8551

8552

8553

8554

8555

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:

8556

$$C = \frac{14 \times M}{21 - Y}$$

8557

8558

8559

1) Where:

- C = the corrected concentration of particulate matter
- M = the measured concentration of particulate matter
- Y = the measured concentration of oxygen in the stack gas, using the Orsat method for oxygen analysis of dry flue gas, presented in Reference 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)

8560

8561

8562

8563

8564

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.

8565  
8566 d) For the purposes of permit enforcement, compliance with the operating  
8567 requirements specified in the permit (under Section 724.445) will be regarded as  
8568 compliance with this Section. However, evidence that compliance with those  
8569 permit conditions is insufficient to ensure compliance with the performance  
8570 requirements of this Section may be "information" justifying modification,  
8571 revocation or reissuance of a permit under 35 Ill. Adm. Code 702.184.  
8572

8573 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
8574

8575 **Section 724.444 Hazardous Waste Incinerator Permits**  
8576

- 8577 a) The owner or operator of a hazardous waste incinerator may burn only wastes  
8578 specified in its permit and only under operating conditions specified for those  
8579 wastes under Section 724.445 except the following:  
8580
- 8581 1) In approved trial burns under 35 Ill. Adm. Code 703.222 through 703.225;  
8582 or  
8583
  - 8584 2) Under exemptions created by Section 724.440.  
8585
- 8586 b) Other hazardous wastes may be burned only after operating conditions have been  
8587 specified in a new permit or a permit modification as applicable. Operating  
8588 requirements for new wastes may be based on either trial burn results or  
8589 alternative data included with Part B of a permit application under 35 Ill. Adm.  
8590 Code 703.205.  
8591
- 8592 c) The permit for a new hazardous waste incinerator must establish appropriate  
8593 conditions for each of the applicable requirements of this Subpart O, including but  
8594 not limited to allowable waste feeds and operating conditions necessary to meet  
8595 the requirements of Section 724.445, sufficient to comply with the following  
8596 standards:  
8597
- 8598 1) For the period beginning with initial introduction of hazardous waste to  
8599 the incinerator and ending with initiation of the trial burn, and only for the  
8600 minimum time required to establish operating conditions required in  
8601 subsection (c)(2) of this Section, not to exceed a duration of 720 hours  
8602 operating time for treatment of hazardous waste, the operating  
8603 requirements must be those most likely to ensure compliance with the  
8604 performance standards of Section 724.443, based on the Agency's  
8605 engineering judgement. The Agency may extend the duration of this  
8606 period once for up to 720 additional hours when good cause for the  
8607 extension is demonstrated by the applicant

8608  
8609  
8610  
8611  
8612  
8613  
8614  
8615  
8616  
8617  
8618  
8619  
8620  
8621  
8622  
8623  
8624  
8625  
8626  
8627  
8628  
8629  
8630  
8631  
8632  
8633  
8634  
8635  
8636  
8637  
8638  
8639  
8640  
8641  
8642  
8643  
8644  
8645  
8646  
8647  
8648  
8649  
8650

- 2) For the duration of the trial burn, the operating requirements must be sufficient to demonstrate compliance with the performance standards of Section 724.443 and must be in accordance with the approved trial burn plan;
- 3) For the period immediately following completion of the trial burn and only for the minimum period sufficient to allow sample analysis, data computation, and submission of the trial burn results by the applicant and review of the trial burn results and modification of the facility permit by the Agency, the operating requirements must be those most likely to ensure compliance with the performance standards of Section 724.443 based on the Agency's engineering judgment.
- 4) For the remaining duration of the permit, the operating requirements must be those demonstrated, in a trial burn or by alternative data specified in 35 Ill. Adm. Code 703.205(c), as sufficient to ensure compliance with the performance standards of Section 724.443.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.445 Operating Requirements**

- a) An incinerator must be operated in accordance with operating requirements specified in the permit. These will be specified on a case-by-case basis as those demonstrated (in a trial burn or in alternative data as specified in Section 724.444(b) and included with Part B of the facility's permit application) to be sufficient to comply with the performance standards of Section 724.443.
- b) Each set of operating requirements will specify the composition of the waste feed (including acceptable variations in the physical or chemical properties of the waste feed that will not affect compliance with the performance requirement of Section 724.443) to which the operating requirements apply. For each such waste feed, the permit will specify acceptable operating limits, including the following conditions:
  - 1) Carbon monoxide (CO) level in the stack exhaust gas;
  - 2) Waste feed rate;
  - 3) Combustion temperature;
  - 4) An appropriate indicator of combustion gas velocity;

- 8651  
8652 5) Allowable variations in incinerator system design or operating procedures;  
8653 and  
8654  
8655 6) Such other operating requirements as are necessary to ensure that the  
8656 performance standards of Section 724.443 are met.  
8657  
8658 c) During start-up and shut-down of an incinerator, hazardous waste (except wastes  
8659 exempted in accordance with Section 724.440) must not be fed into the  
8660 incinerator unless the incinerator is operating within the conditions of operation  
8661 (temperature, air feed rate, etc.) specified in the permit.  
8662  
8663 d) Fugitive emissions from the combustion zone must be controlled by the  
8664 following:  
8665  
8666 1) Keeping the combustion zone totally sealed against fugitive emissions;  
8667  
8668 2) Maintaining a combustion zone pressure lower than atmospheric pressure;  
8669 or  
8670  
8671 3) An alternative means of control demonstrated (with Part B of the permit  
8672 application) to provide fugitive emissions control equivalent to  
8673 maintenance of combustion zone pressure lower than atmospheric  
8674 pressure.  
8675  
8676 e) An incinerator must be operated with a functioning system to automatically cut  
8677 off waste feed to the incinerator when operating conditions deviate from limits  
8678 established under subsection (a) of this Section.  
8679  
8680 f) An incinerator must cease operation when changes in waste feed, incinerator  
8681 design, or operating conditions exceed limits designated in its permit.

8682 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
8683  
8684

8685 SUBPART S: SPECIAL PROVISIONS FOR CLEANUP  
8686

8687 **Section 724.650 Applicability of Corrective Action Management Unit Regulations**  
8688

- 8689 a) Except as provided in subsection (b) of this Section, a CAMU is subject to the  
8690 requirements of Section 724.652.  
8691  
8692 b) A CAMU that is approved before April 22, 2002, or for which substantially  
8693 complete applications (or equivalents) were submitted to the Agency on or before

8694 November 20, 2000, is subject to the requirements in Section 724.651 for a  
 8695 grandfathered CAMU. Within a grandfathered CAMU, CAMU waste, activities,  
 8696 and design will not be subject to the standards in Section 724.652, so long as the  
 8697 waste, activities, and design remain within the general scope of the CAMU, as  
 8698 approved.  
 8699

8700 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 8701

8702 **Section 724.651 Grandfathered Corrective Action Management Units**  
 8703

8704 a) To implement remedies pursuant to Section 724.201 or RCRA section 3008(h), or  
 8705 to implement remedies at a permitted facility that is not subject to Section  
 8706 724.201, the Agency may designate an area at the facility as a corrective action  
 8707 management unit in accordance with the requirements of this Section.

8708 "Corrective action management unit" or "CAMU" means an area within a facility  
 8709 that is used only for managing remediation wastes for implementing corrective  
 8710 action or cleanup at that facility. A CAMU must be located within the contiguous  
 8711 property under the control of the owner or operator where the wastes to be  
 8712 managed in the CAMU originated. One or more CAMUs may be designated at a  
 8713 facility.

8714 1) Placement of remediation wastes into or within a CAMU does not  
 8715 constitute land disposal of hazardous wastes.  
 8716

8717 2) Consolidation or placement of remediation wastes into or within a CAMU  
 8718 does not constitute creation of a unit subject to minimum technology  
 8719 requirements.  
 8720

8721 b) Designation of a CAMU.  
 8722

8723 1) The Agency may designate a regulated unit (as defined in Section  
 8724 724.190(a)(2)) as a CAMU, or it may incorporate a regulated unit into a  
 8725 CAMU, if the following is true:  
 8726

8727 A) The regulated unit is closed or closing, meaning it has begun the  
 8728 closure process pursuant to Section 724.213 or 35 Ill. Adm. Code  
 8729 725.213; and  
 8730

8731 B) Inclusion of the regulated unit will enhance implementation of  
 8732 effective, protective, and reliable remedial actions for the facility.  
 8733

8734 2) The requirements of Subparts F, G, and H of this Part and the unit-specific  
 8735 requirements of this Part or the 35 Ill. Adm. Code 725 requirements that  
 8736

8737 applied to that regulated unit will continue to apply to that portion of the  
8738 CAMU after incorporation into the CAMU.

- 8739
- 8740 c) The Agency must designate a CAMU in accordance with the following factors:
- 8741
- 8742 1) The CAMU must facilitate the implementation of reliable, effective,  
8743 protective, and cost-effective remedies;
- 8744
- 8745 2) Waste management activities associated with the CAMU must not create  
8746 unacceptable risks to humans or to the environment resulting from  
8747 exposure to hazardous wastes or hazardous constituents;
- 8748
- 8749 3) The CAMU must include uncontaminated areas of the facility only if  
8750 including such areas for the purpose of managing remediation waste is  
8751 more protective than managing such wastes at contaminated areas of the  
8752 facility;
- 8753
- 8754 4) Areas within the CAMU where wastes remain in place after its closure  
8755 must be managed and contained so as to minimize future releases to the  
8756 extent practicable;
- 8757
- 8758 5) The CAMU must expedite the timing of remedial activity implementation,  
8759 when appropriate and practicable;
- 8760
- 8761 6) The CAMU must enable the use, when appropriate, of treatment  
8762 technologies (including innovative technologies) to enhance the long-term  
8763 effectiveness of remedial actions by reducing the toxicity, mobility, or  
8764 volume of wastes that will remain in place after closure of the CAMU; and
- 8765
- 8766 7) The CAMU must, to the extent practicable, minimize the land area of the  
8767 facility upon which wastes will remain in place after closure of the  
8768 CAMU.
- 8769
- 8770 d) The owner or operator must provide sufficient information to enable the Agency  
8771 to designate a CAMU in accordance with the standards of this Section.
- 8772
- 8773 e) The Agency must specify in the permit the requirements applicable to a CAMU,  
8774 including the following:
- 8775
- 8776 1) The areal configuration of the CAMU.
- 8777
- 8778 2) Requirements for remediation waste management, including the  
8779 specification of applicable design, operation, and closure requirements.

8780  
8781  
8782  
8783  
8784  
8785  
8786  
8787  
8788  
8789  
8790  
8791  
8792  
8793  
8794  
8795  
8796  
8797  
8798  
8799  
8800  
8801  
8802  
8803  
8804  
8805  
8806  
8807  
8808  
8809  
8810  
8811  
8812  
8813  
8814  
8815  
8816  
8817  
8818  
8819  
8820  
8821  
8822

- 3) Requirements for groundwater monitoring 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; and
  - 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.
- 4) Closure and post-closure care requirements.
  - A) Closure of a CAMU must do the following:
    - i) Minimize the need for further maintenance; and
    - ii) Control, minimize, or eliminate, to the extent necessary to adequately protect human health and the environment, for areas where wastes remain in place, post-closure escape of hazardous waste, 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:
    - i) Requirements for excavation, removal, treatment, or containment of wastes;
    - ii) For areas in which wastes will remain after closure of the CAMU, requirements for the capping of such areas; and
    - iii) Requirements for the removal and decontamination of equipment, devices, and structures used in remediation 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

8823  
8824  
8825  
8826  
8827  
8828  
8829  
8830  
8831  
8832  
8833  
8834  
8835  
8836  
8837  
8838  
8839  
8840  
8841  
8842  
8843  
8844  
8845  
8846  
8847  
8848  
8849  
8850  
8851  
8852  
8853  
8854  
8855  
8856  
8857  
8858  
8859  
8860  
8861  
8862  
8863  
8864  
8865

factors:

- i) The characteristics of the CAMU;
- ii) The volume of wastes that remain in place after closure;
- iii) The potential for releases from the CAMU;
- iv) The physical and chemical characteristics of the waste;
- v) The hydrological and other relevant environmental conditions at the facility that may influence the migration of any potential or actual releases; and
- vi) The potential for exposure of humans and environmental receptors if releases were to occur from the CAMU.

D) Post-closure care requirements as necessary to adequately protect human health and the environment, including, 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 Agency must document the rationale for designating the CAMU and must make such documentation available to the public.
- g) 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 703.283.
- h) 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 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**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

8866 management unit pursuant to the requirements in this Section. "Corrective action  
8867 management unit" or "CAMU" means an area within a facility that is used only  
8868 for managing CAMU-eligible wastes for implementing corrective action or  
8869 cleanup at that facility. A CAMU must be located within the contiguous property  
8870 under the control of the owner or operator where the wastes to be managed in the  
8871 CAMU originated. One or more CAMUs may be designated at a facility.  
8872

8873 1) "CAMU-eligible waste" means the following:  
8874

8875 A) All solid and hazardous wastes, and all media (including  
8876 groundwater, surface water, soils, and sediments) and debris, that  
8877 are managed for implementing cleanup. As-generated wastes  
8878 (either hazardous or non-hazardous) from ongoing industrial  
8879 operations at a site are not CAMU-eligible wastes.  
8880

8881 B) Wastes that would otherwise meet the description in subsection  
8882 (a)(1)(A) ~~of this Section~~ are not CAMU-eligible waste where the  
8883 following is true:  
8884

8885 i) The wastes are hazardous waste found during cleanup in  
8886 intact or substantially intact containers, tanks, or other non-  
8887 land-based units found above ground, unless the wastes are  
8888 first placed in the tanks, containers, or non-land-based units  
8889 as part of cleanup, or the containers or tanks are excavated  
8890 during the course of cleanup; or  
8891

8892 ii) The Agency makes the determination in subsection (a)(2)  
8893 ~~of this Section~~ to prohibit the wastes from management in a  
8894 CAMU.  
8895

8896 C) Notwithstanding subsection (a)(1)(A) ~~of this Section~~, where  
8897 appropriate, as-generated non-hazardous waste may be placed in a  
8898 CAMU where such waste is being used to facilitate treatment or  
8899 the performance of the CAMU.  
8900

8901 2) The Agency must prohibit the placement of waste in a CAMU where the  
8902 Agency determines that the wastes have not been managed in compliance  
8903 with applicable land disposal treatment standards of 35 Ill. Adm. Code  
8904 728, applicable unit design requirements of this Part or 35 Ill. Adm. Code  
8905 725, or other applicable requirements of this Subtitle G, and that the non-  
8906 compliance likely contributed to the release of the waste.  
8907

8908 3) Prohibition against placing liquids in a CAMU.

- 8909  
8910  
8911  
8912  
8913  
8914  
8915  
8916  
8917  
8918  
8919  
8920  
8921  
8922  
8923  
8924  
8925  
8926  
8927  
8928  
8929  
8930  
8931  
8932  
8933  
8934  
8935  
8936  
8937  
8938  
8939  
8940  
8941  
8942  
8943  
8944  
8945  
8946  
8947  
8948  
8949  
8950  
8951
- 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(c) 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(e).
  - 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(b). Sorbents used to treat free liquids in a CAMU must meet the requirements of Section 724.414(d).
- 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

8952 of this Part or 35 Ill. Adm. Code 265 that applied to the regulated unit will  
8953 continue to apply to that portion of the CAMU after incorporation into the  
8954 CAMU.  
8955

- 8956 c) The Agency must designate a CAMU that will be used for storage or treatment  
8957 only in accordance with subsection (f) ~~of this Section~~. The Agency must  
8958 designate any other CAMU in accordance with the following requirements:  
8959
- 8960 1) The CAMU must facilitate the implementation of reliable, effective,  
8961 protective, and cost-effective remedies;  
8962
  - 8963 2) Waste management activities associated with the CAMU must not create  
8964 unacceptable risks to humans or to the environment resulting from  
8965 exposure to hazardous wastes or hazardous constituents;  
8966
  - 8967 3) The CAMU must include uncontaminated areas of the facility, only if  
8968 including such areas for the purpose of managing CAMU-eligible waste is  
8969 more protective than management of such wastes at contaminated areas of  
8970 the facility;  
8971
  - 8972 4) Areas within the CAMU, where wastes remain in place after closure of the  
8973 CAMU, must be managed and contained so as to minimize future releases,  
8974 to the extent practicable;  
8975
  - 8976 5) The CAMU must expedite the timing of remedial activity implementation,  
8977 when appropriate and practicable;  
8978
  - 8979 6) The CAMU must enable the use, when appropriate, of treatment  
8980 technologies (including innovative technologies) to enhance the long-term  
8981 effectiveness of remedial actions by reducing the toxicity, mobility, or  
8982 volume of wastes that will remain in place after closure of the CAMU; and  
8983
  - 8984 7) The CAMU must, to the extent practicable, minimize the land area of the  
8985 facility upon which wastes will remain in place after closure of the  
8986 CAMU.  
8987

- 8988 d) The owner or operator must provide sufficient information to enable the Agency  
8989 to designate a CAMU in accordance with the criteria in this Section. This must  
8990 include, unless not reasonably available, information on the following:  
8991
- 8992 1) The origin of the waste and how it was subsequently managed (including a  
8993 description of the timing and circumstances surrounding the disposal or  
8994 release);

8995  
8996  
8997  
8998  
8999  
9000  
9001  
9002  
9003  
9004  
9005  
9006  
9007  
9008  
9009  
9010  
9011  
9012  
9013  
9014  
9015  
9016  
9017  
9018  
9019  
9020  
9021  
9022  
9023  
9024  
9025  
9026  
9027  
9028  
9029  
9030  
9031  
9032  
9033  
9034  
9035  
9036  
9037

- 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  $1 \times 10^{-7}$  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

9038 as the liner and leachate collection systems in subsection  
9039 (e)(3)(A) of this Section; or

- 9040  
9041 ii) The CAMU is to be established in an area with existing  
9042 significant levels of contamination, and the Agency  
9043 determines that an alternative design, including a design  
9044 that does not include a liner, would prevent migration from  
9045 the unit that would exceed long-term remedial goals.

- 9046  
9047 4) Minimum treatment requirements: Unless the wastes will be placed in a  
9048 CAMU for storage or treatment only in accordance with subsection (f) of  
9049 this Section, CAMU-eligible wastes that, absent this Section, would be  
9050 subject to the treatment requirements of 35 Ill. Adm. Code 728, and that  
9051 the Agency determines contain principal hazardous constituents must be  
9052 treated to the standards specified in subsection (e)(4)(C) of this Section.

- 9053  
9054 A) Principal hazardous constituents are those constituents that the  
9055 Agency determines pose a risk to human health and the  
9056 environment substantially higher than the cleanup levels or goals at  
9057 the site.

- 9058  
9059 i) In general, the Agency must designate as principal  
9060 hazardous constituents those contaminants specified in  
9061 subsection (e)(4)(H) of this Section.

9062  
9063 BOARD NOTE: The Board has codified 40 CFR  
9064 264.552(e)(4)(i)(A)(1) and (e)(4)(i)(A)(2) as subsections  
9065 (e)(4)(H)(i) and (e)(4)(H)(ii) of this Section in order to  
9066 comply with Illinois Administrative Code codification  
9067 requirements.

- 9068  
9069 ii) The Agency must also designate constituents as principal  
9070 hazardous constituents, where appropriate, when risks to  
9071 human health and the environment posed by the potential  
9072 migration of constituents in wastes to groundwater are  
9073 substantially higher than cleanup levels or goals at the site.  
9074 When making such a designation, the Agency must  
9075 consider such factors as constituent concentrations, and fate  
9076 and transport characteristics under site conditions.

- 9077  
9078 iii) The Agency must also designate other constituents as  
9079 principal hazardous constituents that the Agency  
9080 determines pose a risk to human health and the

environment substantially higher than that posed by the cleanup levels or goals at the site.

- 9081
- 9082
- 9083
- 9084 B) In determining which constituents are "principal hazardous
- 9085 constituents," the Agency must consider all constituents that,
- 9086 absent this Section, would be subject to the treatment requirements
- 9087 in 35 Ill. Adm. Code 728.
- 9088
- 9089 C) Waste that the Agency determines contains principal hazardous
- 9090 constituents must meet treatment standards determined in
- 9091 accordance with subsection (e)(4)(D) or (e)(4)(E) of this Section.
- 9092
- 9093 D) Treatment standards for wastes placed in a CAMU.
- 9094
- 9095 i) For non-metals, treatment must achieve 90 percent
- 9096 reduction in total principal hazardous constituent
- 9097 concentrations, except as provided by subsection
- 9098 (e)(4)(D)(iii) of this Section.
- 9099
- 9100 ii) For metals, treatment must achieve 90 percent reduction in
- 9101 principal hazardous constituent concentrations as measured
- 9102 in leachate from the treated waste or media (tested
- 9103 according to the TCLP) or 90 percent reduction in total
- 9104 constituent concentrations (when a metal removal treatment
- 9105 technology is used), except as provided by subsection
- 9106 (e)(4)(D)(iii) of this Section.
- 9107
- 9108 iii) When treatment of any principal hazardous constituent to a
- 9109 90 percent reduction standard would result in a
- 9110 concentration less than 10 times the Universal Treatment
- 9111 Standard for that constituent, treatment to achieve
- 9112 constituent concentrations less than 10 times the Universal
- 9113 Treatment Standard is not required. Universal Treatment
- 9114 Standards are identified in Table U to 35 Ill. Adm. Code
- 9115 728.
- 9116
- 9117 iv) For waste exhibiting the hazardous characteristic of
- 9118 ignitability, corrosivity, or reactivity, the waste must also
- 9119 be treated to eliminate these characteristics.
- 9120
- 9121 v) For debris, the debris must be treated in accordance with 35
- 9122 Ill. Adm. Code 728.145, or by methods or to levels
- 9123 established pursuant to subsections (e)(4)(D)(i) through

- 9124 (e)(4)(D)(iv) or subsection (e)(4)(E) ~~of this Section~~,  
 9125 whichever the Agency determines is appropriate.  
 9126
- 9127 vi) Alternatives to TCLP. For metal bearing wastes for which  
 9128 metals removal treatment is not used, the Agency must  
 9129 specify a leaching test other than Method 1311 (Toxicity  
 9130 Characteristic Leaching Procedure), in "Test Methods for  
 9131 Evaluating Solid Waste, Physical/Chemical Methods,"  
 9132 USEPA publication number EPA-530/SW-846,  
 9133 incorporated by reference in 35 Ill. Adm. Code 720.111(a)  
 9134 to measure treatment effectiveness, provided the Agency  
 9135 determines that an alternative leach testing protocol is  
 9136 appropriate for use, and that the alternative more accurately  
 9137 reflects conditions at the site that affect leaching.  
 9138
- 9139 E) Adjusted standards. The Board will grant an adjusted standard  
 9140 pursuant to Section 28.1 of the Act to adjust the treatment level or  
 9141 method in subsection (e)(4)(D) ~~of this Section~~ to a higher or lower  
 9142 level, based on one or more of the following factors, as  
 9143 appropriate, if the owner or operator demonstrates that the adjusted  
 9144 level or method would adequately protect human health and the  
 9145 environment, based on consideration of the following:  
 9146
- 9147 i) The technical impracticability of treatment to the levels or  
 9148 by the methods in subsection (e)(4)(D) ~~of this Section~~;  
 9149
- 9150 ii) The levels or methods in subsection (e)(4)(D) ~~of this~~  
 9151 ~~Section~~ would result in concentrations of principal  
 9152 hazardous constituents (PHCs) that are significantly above  
 9153 or below cleanup standards applicable to the site  
 9154 (established either site-specifically, or promulgated  
 9155 pursuant to State or federal law);  
 9156
- 9157 iii) The views of the affected local community on the treatment  
 9158 levels or methods in subsection (e)(4)(D) ~~of this Section~~, as  
 9159 applied at the site, and, for treatment levels, the treatment  
 9160 methods necessary to achieve these levels;  
 9161
- 9162 iv) The short-term risks presented by the on-site treatment  
 9163 method necessary to achieve the levels or treatment  
 9164 methods in subsection (e)(4)(D) ~~of this Section~~;  
 9165
- 9166 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)(I) 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

- 9210 CAMU meets the Subtitle C liner and leachate collection  
 9211 requirements for new land disposal units at Section  
 9212 724.401(c) and (d);  
 9213  
 9214 iii) Where, after review of appropriate treatment technologies,  
 9215 the Board determines that cost-effective treatment is not  
 9216 reasonably available, and the CAMU meets the Subtitle C  
 9217 liner and leachate collection requirements for new land  
 9218 disposal units at Section 724.401(c) and (d);  
 9219  
 9220 iv) Where cost-effective treatment has been used and the  
 9221 principal hazardous constituents in the treated wastes are of  
 9222 very low mobility; or  
 9223  
 9224 v) Where, after review of appropriate treatment technologies,  
 9225 the Board determines that cost-effective treatment is not  
 9226 reasonably available, the principal hazardous constituents  
 9227 in the wastes are of very low mobility, and either the  
 9228 CAMU meets or exceeds the liner standards for new,  
 9229 replacement, or a laterally expanded CAMU in subsections  
 9230 (e)(3)(A) and (e)(3)(B) of this Section or the CAMU  
 9231 provides substantially equivalent or greater protection.  
 9232  
 9233 5) Except as provided in subsection (f) of this Section, requirements for  
 9234 groundwater monitoring and corrective action that are sufficient to do the  
 9235 following:  
 9236  
 9237 A) Continue to detect and to characterize the nature, extent,  
 9238 concentration, direction, and movement of existing releases of  
 9239 hazardous constituents in groundwater from sources located within  
 9240 the CAMU;  
 9241  
 9242 B) Detect and subsequently characterize releases of hazardous  
 9243 constituents to groundwater that may occur from areas of the  
 9244 CAMU in which wastes will remain in place after closure of the  
 9245 CAMU; and  
 9246  
 9247 C) Require notification to the Agency and corrective action as  
 9248 necessary to adequately protect human health and the environment  
 9249 for releases to groundwater from the CAMU.  
 9250  
 9251 6) Except as provided in subsection (f) of this Section, closure and post-  
 9252 closure requirements, as follows:

9253  
9254  
9255  
9256  
9257  
9258  
9259  
9260  
9261  
9262  
9263  
9264  
9265  
9266  
9267  
9268  
9269  
9270  
9271  
9272  
9273  
9274  
9275  
9276  
9277  
9278  
9279  
9280  
9281  
9282  
9283  
9284  
9285  
9286  
9287  
9288  
9289  
9290  
9291  
9292  
9293  
9294  
9295

- A) Closure of corrective action management units must do the following:
  - i) It must minimize the need for further maintenance; and
  - ii) It must control, minimize, or eliminate, to the extent necessary 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) 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.

9296  
 9297  
 9298  
 9299  
 9300  
 9301  
 9302  
 9303  
 9304  
 9305  
 9306  
 9307  
 9308  
 9309  
 9310  
 9311  
 9312  
 9313  
 9314  
 9315  
 9316  
 9317  
 9318  
 9319  
 9320  
 9321  
 9322  
 9323  
 9324  
 9325  
 9326  
 9327  
 9328  
 9329  
 9330  
 9331  
 9332  
 9333  
 9334  
 9335  
 9336  
 9337  
 9338

- 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) The final cover must provide long-term minimization of migration of liquids through the closed unit;
  - ii) The final cover must function with minimum maintenance;
  - iii) The final cover must promote drainage and minimize erosion or abrasion of the cover;
  - iv) The final cover must accommodate settling and subsidence so that the cover's integrity is maintained; and

9339  
 9340  
 9341  
 9342  
 9343  
 9344  
 9345  
 9346  
 9347  
 9348  
 9349  
 9350  
 9351  
 9352  
 9353  
 9354  
 9355  
 9356  
 9357  
 9358  
 9359  
 9360  
 9361  
 9362  
 9363  
 9364  
 9365  
 9366  
 9367  
 9368  
 9369  
 9370  
 9371  
 9372  
 9373  
 9374  
 9375  
 9376  
 9377  
 9378  
 9379  
 9380  
 9381

- v) The final cover must 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 (e)(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

9382 protect human health and the environment.

9383  
9384  
9385  
9386  
9387  
9388  
9389  
9390  
9391  
9392  
9393  
9394  
9395  
9396  
9397  
9398  
9399  
9400  
9401  
9402  
9403  
9404  
9405  
9406  
9407  
9408  
9409  
9410  
9411  
9412  
9413  
9414  
9415  
9416  
9417  
9418  
9419  
9420  
9421  
9422  
9423  
9424

- 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 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.653 Temporary Units**

- a) For temporary tanks and container storage areas used to treat or store hazardous remediation wastes during remedial activities required pursuant to Section 724.201 or RCRA section 3008(h), or at a permitted facility that is not subject to Section 724.201, the Agency may designate a unit at the facility as a temporary unit. A temporary unit must be located within the contiguous property under the control of the owner or operator where the wastes to be managed in the temporary unit originated. For temporary units, the Agency may replace the design, operating, or closure standards applicable to these units pursuant to this Part 724 or 35 Ill. Adm. Code 725 with alternative requirements that adequately protect human health and the environment.
- b) Any temporary unit to which alternative requirements are applied in accordance with subsection (a) of this Section must be as follows:
  - 1) Located within the facility boundary; and
  - 2) Used only for treatment or storage of remediation wastes.
- c) In establishing alternative requirements to be applied to a temporary unit, the Agency must consider the following factors:
  - 1) The length of time such unit will be in operation;
  - 2) The type of unit;
  - 3) The volumes of wastes to be managed;
  - 4) The physical and chemical characteristics of the wastes to be managed in

- 9425 the unit;
- 9426
- 9427 5) The potential for releases from the unit;
- 9428
- 9429 6) The hydrogeological and other relevant environmental conditions at the
- 9430 facility that may influence the migration of any potential releases; and
- 9431
- 9432 7) The potential for exposure of humans and environmental receptors if
- 9433 releases were to occur from the unit.
- 9434
- 9435 d) The Agency must specify in the permit the length of time a temporary unit will be
- 9436 allowed to operate, which must be no longer than one year. The Agency must
- 9437 also specify the design, operating, and closure requirements for the unit.
- 9438
- 9439 e) The Agency may extend the operational period of a temporary unit once, for no
- 9440 longer than a period of one year beyond that originally specified in the permit, if
- 9441 the Agency determines the following:
- 9442
- 9443 1) That continued operation of the unit will not pose a threat to human health
- 9444 and the environment; and
- 9445
- 9446 2) That continued operation of the unit is necessary to ensure timely and
- 9447 efficient implementation of remedial actions at the facility.
- 9448
- 9449 f) Incorporation of a temporary unit or a time extension for a temporary unit into an
- 9450 existing permit must be as follows:
- 9451
- 9452 1) Approved in accordance with the procedures for Agency-initiated permit
- 9453 modifications pursuant to 35 Ill. Adm. Code 703.270 through 703.273; or
- 9454
- 9455 2) Requested by the owner or operator as a Class 2 modification according to
- 9456 the procedures pursuant to 35 Ill. Adm. Code 703.283.
- 9457
- 9458 g) The Agency must document the rationale for designating a temporary unit and for
- 9459 granting time extensions for temporary units and must make such documentation
- 9460 available to the public.
- 9461

9462 BOARD NOTE: USEPA promulgated 40 CFR 264.553, from which this Section

9463 was derived, pursuant to HSWA provisions of RCRA Subtitle C. Since the

9464 federal provision became immediately effective in Illinois, and until USEPA

9465 authorizes this Illinois provision, an owner or operator must seek TU

9466 authorization from USEPA Region 5, as well as authorization from the Agency

9467 pursuant to this Section.

9468  
 9469  
 9470  
 9471  
 9472  
 9473  
 9474  
 9475  
 9476  
 9477  
 9478  
 9479  
 9480  
 9481  
 9482  
 9483  
 9484  
 9485  
 9486  
 9487  
 9488  
 9489  
 9490  
 9491  
 9492  
 9493  
 9494  
 9495  
 9496  
 9497  
 9498  
 9499  
 9500  
 9501  
 9502  
 9503  
 9504  
 9505  
 9506  
 9507  
 9508  
 9509  
 9510

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.654 Staging 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 a qualified 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

9511  
9512  
9513  
9514  
9515  
9516  
9517  
9518  
9519  
9520  
9521  
9522  
9523  
9524  
9525  
9526  
9527  
9528  
9529  
9530  
9531  
9532  
9533  
9534  
9535  
9536  
9537  
9538  
9539  
9540  
9541  
9542  
9543  
9544  
9545  
9546  
9547  
9548  
9549  
9550  
9551  
9552  
9553

- 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 runoff 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;

- 9554 E) The hydrogeological and other relevant environmental conditions  
9555 at the facility that may influence the migration of any potential  
9556 releases; and  
9557
- 9558 F) The potential for human and environmental exposure to potential  
9559 releases from the unit.  
9560
- 9561 e) Receipt of ignitable or reactive remediation waste. An owner or operator must  
9562 not place ignitable or reactive remediation waste in a staging pile unless the  
9563 following is true:  
9564
- 9565 1) The owner or operator has treated, rendered, or mixed the remediation  
9566 waste before it placed the waste in the staging pile so that the following is  
9567 true of the waste:  
9568
- 9569 A) The remediation waste no longer meets the definition of ignitable  
9570 or reactive pursuant to 35 Ill. Adm. Code 721.121 or 721.123; and  
9571
- 9572 B) The owner or operator has complied with Section 724.117(b); or  
9573
- 9574 2) The owner or operator manages the remediation waste to protect it from  
9575 exposure to any material or condition that may cause it to ignite or react.  
9576
- 9577 f) Managing incompatible remediation wastes in a staging pile. The term  
9578 "incompatible waste" is defined in 35 Ill. Adm. Code 720.110. An owner or  
9579 operator must comply with the following requirements for incompatible wastes in  
9580 staging piles:  
9581
- 9582 1) The owner or operator must not place incompatible remediation wastes in  
9583 the same staging pile unless an owner or operator has complied with  
9584 Section 724.117(b);  
9585
- 9586 2) If remediation waste in a staging pile is incompatible with any waste or  
9587 material stored nearby in containers, other piles, open tanks, or land  
9588 disposal units (for example, surface impoundments), an owner or operator  
9589 must separate the incompatible materials, or protect them from one  
9590 another by using a dike, berm, wall, or other device; and  
9591
- 9592 3) The owner or operator must not pile remediation waste on the same base  
9593 where incompatible wastes or materials were previously piled, unless the  
9594 base has been decontaminated sufficiently to comply with Section  
9595 724.117(b).  
9596

- 9597 g) Staging piles are not subject to land disposal restrictions and federal minimum  
9598 technological requirements. Placing hazardous remediation wastes into a staging  
9599 pile does not constitute land disposal of hazardous wastes or create a unit that is  
9600 subject to the federal minimum technological requirements of section 3004(o) of  
9601 RCRA, 42 USC 6924(o).  
9602
- 9603 h) How long an owner or operator may operate a staging pile. The Agency may  
9604 allow a staging pile to operate for up to two years after hazardous remediation  
9605 waste is first placed into the pile. An owner or operator must use a staging pile no  
9606 longer than the length of time designated by the Agency in the permit, closure  
9607 plan, or order (the "operating term"), except as provided in subsection (i) of this  
9608 Section.  
9609
- 9610 i) Receiving an operating extension for a staging pile.  
9611
- 9612 1) The Agency may grant one operating term extension of up to 180 days  
9613 beyond the operating term limit contained in the permit, closure plan, or  
9614 order (see subsection (l) of this Section for modification procedures). To  
9615 justify the need for an extension, an owner or operator must provide  
9616 sufficient and accurate information to enable the Agency to determine that  
9617 the following is true of continued operation of the staging pile:  
9618
- 9619 A) Continued operation will not pose a threat to human health and the  
9620 environment; and  
9621
- 9622 B) Continued operation is necessary to ensure timely and efficient  
9623 implementation of remedial actions at the facility.  
9624
- 9625 2) The Agency must, as a condition of the extension, specify further  
9626 standards and design criteria in the permit, closure plan, or order, as  
9627 necessary, to ensure adequate protection of human health and the  
9628 environment.  
9629
- 9630 j) The closure requirement for a staging pile located in a previously contaminated  
9631 area.  
9632
- 9633 1) Within 180 days after the operating term of the staging pile expires, an  
9634 owner or operator must close a staging pile located in a previously  
9635 contaminated area of the site by removing or decontaminating all of the  
9636 following:  
9637
- 9638 A) Remediation waste;  
9639

- 9640 B) Contaminated containment system components; and  
9641  
9642 C) Structures and equipment contaminated with waste and leachate.  
9643  
9644 2) An owner or operator must also decontaminate contaminated subsoils in a  
9645 manner and according to a schedule that the Agency determines will  
9646 adequately protect human health and the environment.  
9647  
9648 3) The Agency must include the above requirements in the permit, closure  
9649 plan, or order in which the staging pile is designated.  
9650  
9651 k) The closure requirement for a staging pile located in a previously uncontaminated  
9652 area.  
9653  
9654 1) Within 180 days after the operating term of the staging pile expires, an  
9655 owner or operator must close a staging pile located in an uncontaminated  
9656 area of the site according to Sections 724.358(a) and 724.211 or according  
9657 to 35 Ill. Adm. Code 725.358(a) and 725.211.  
9658  
9659 2) The Agency must include the requirement of this Section stated in  
9660 subsection (k)(1) in the permit, closure plan, or order in which the staging  
9661 pile is designated.  
9662  
9663 l) Modifying an existing permit (e.g., a RAP), closure plan, or order to allow the use  
9664 of a staging pile.  
9665  
9666 1) To modify a permit, other than a RAP, to incorporate a staging pile or  
9667 staging pile operating term extension, either of the following must occur:  
9668  
9669 A) The Agency must approve the modification pursuant to the  
9670 procedures for Agency-initiated permit modifications in 35 Ill.  
9671 Adm. Code 703.270 through 703.273; or  
9672  
9673 B) An owner or operator must request a Class 2 modification pursuant  
9674 to 35 Ill. Adm. Code 703.280 through 703.283.  
9675  
9676 2) To modify a RAP to incorporate a staging pile or staging pile operating  
9677 term extension, an owner or operator must comply with the RAP  
9678 modification requirements pursuant to 35 Ill. Adm. Code 703.304(a) and  
9679 (b).  
9680  
9681 3) To modify a closure plan to incorporate a staging pile or staging pile  
9682 operating term extension, an owner or operator must follow the applicable

- 9683 requirements pursuant to Section 724.212(c) or 35 Ill. Adm. Code  
9684 725.212(c).  
9685  
9686 4) To modify an order to incorporate a staging pile or staging pile operating  
9687 term extension, an owner or operator must follow the terms of the order  
9688 and the applicable provisions of 35 Ill. Adm. Code 703.155(a)(5) or (b)(5).  
9689  
9690 m) Public availability of information about a staging pile. The Agency must  
9691 document the rationale for designating a staging pile or staging pile operating  
9692 term extension and make this documentation available to the public.  
9693

9694 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
9695

9696 **Section 724.655 Disposal of CAMU-Eligible Wastes in Permitted Hazardous Waste**  
9697 **Landfills**  
9698

- 9699 a) The Agency must approve placement of CAMU-eligible wastes in hazardous  
9700 waste landfills not located at the site from which the waste originated, without the  
9701 wastes meeting the requirements of 35 Ill. Adm. Code 728, if it determines that  
9702 the following conditions are met:  
9703  
9704 1) The waste meets the definition of CAMU-eligible waste in Section  
9705 724.652(a)(1) and (a)(2).  
9706  
9707 2) The Agency identifies principal hazardous constituents in such waste, in  
9708 accordance with Section 724.652(e)(4)(A) and (e)(4)(B), and requires that  
9709 such principal hazardous constituents are treated to any of the following  
9710 standards specified for CAMU-eligible wastes:  
9711  
9712 A) The treatment standards under Section 724.652(e)(4)(D); or  
9713  
9714 B) Treatment standards adjusted in accordance with Section  
9715 724.652(e)(4)(E)(i), (e)(4)(E)(iii), (e)(4)(E)(iv), or (e)(4)(F)(i); or  
9716  
9717 C) Treatment standards adjusted in accordance with Section  
9718 724.652(e)(4)(I)(ii), where treatment has been used and that  
9719 treatment significantly reduces the toxicity or mobility of the  
9720 principal hazardous constituents in the waste, minimizing the  
9721 short-term and long-term threat posed by the waste, including the  
9722 threat at the remediation site.  
9723  
9724 3) The landfill receiving the CAMU-eligible waste must have a RCRA  
9725 hazardous waste permit, meet the requirements for new landfills in

9726 Subpart N of this Part, and be authorized to accept CAMU-eligible wastes;  
9727 for the purposes of this requirement, "permit" does not include interim  
9728 status.  
9729

9730 b) The person seeking approval must provide sufficient information to enable the  
9731 Agency to approve placement of CAMU-eligible waste in accordance with  
9732 subsection (a) of this Section. Information required by Section 724.652(d)(1)  
9733 through (d)(3) for CAMU applications must be provided, unless not reasonably  
9734 available.  
9735

9736 c) The Agency must provide public notice and a reasonable opportunity for public  
9737 comment before approving CAMU eligible waste for placement in an off-site  
9738 permitted hazardous waste landfill, consistent with the requirements for CAMU  
9739 approval at Section 724.652(h). The approval must be specific to a single  
9740 remediation.  
9741

9742 d) Applicable hazardous waste management requirements in this Part, including  
9743 recordkeeping requirements to demonstrate compliance with treatment standards  
9744 approved under this Section, for CAMU-eligible waste must be incorporated into  
9745 the receiving facility permit through permit issuance or a permit modification,  
9746 providing notice and an opportunity for comment and a hearing. Notwithstanding  
9747 35 Ill. Adm. Code 702.181(a), a landfill may not receive hazardous CAMU-  
9748 eligible waste under this Section unless its permit specifically authorizes receipt  
9749 of such waste.  
9750

9751 e) For each remediation, CAMU-eligible waste may not be placed in an off-site  
9752 landfill authorized to receive CAMU-eligible waste in accordance with subsection  
9753 (d) of this Section until the following additional conditions have been met:  
9754

9755 1) The landfill owner or operator notifies the Agency and persons on the  
9756 facility mailing list, maintained in accordance with 35 Ill. Adm. Code  
9757 705.163(a), of his or her intent to receive CAMU-eligible waste in  
9758 accordance with this Section; the notice must identify the source of the  
9759 remediation waste, the principal hazardous constituents in the waste, and  
9760 treatment requirements.  
9761

9762 2) Persons on the facility mailing list may provide comments, including  
9763 objections to the receipt of the CAMU-eligible waste, to the Agency  
9764 within 15 days after notification.  
9765

9766 3) The Agency must object to the placement of the CAMU-eligible waste in  
9767 the landfill within 30 days of notification; the Agency must extend the  
9768 review period an additional 30 days if it determines that the extension is

- 9769 necessary because of public concerns or insufficient information.  
 9770  
 9771 4) CAMU-eligible wastes may not be placed in the landfill until the Agency  
 9772 has notified the facility owner or operator that it does not object to its  
 9773 placement.  
 9774  
 9775 5) If the Agency objects to the placement or does not notify the facility  
 9776 owner or operator that it has chosen not to object, the facility may not  
 9777 receive the waste, notwithstanding 35 Ill. Adm. Code 702.181(a), until the  
 9778 objection has been resolved, or the owner/operator obtains a permit  
 9779 modification in accordance with the procedures of 35 Ill. Adm. Code  
 9780 703.280 through 703.283 specifically authorizing receipt of the waste.  
 9781  
 9782 6) The Board will grant an adjusted standard under Section 28.1 of the Act  
 9783 that modifies, reduces, or eliminates the notification requirements of this  
 9784 subsection (e) as they apply to specific categories of CAMU-eligible  
 9785 waste, if the owner or operator demonstrates that this is possible based on  
 9786 minimal risk.  
 9787  
 9788 f) Generators of CAMU-eligible wastes sent off-site to a hazardous waste landfill  
 9789 under this Section must comply with the requirements of 35 Ill. Adm. Code  
 9790 728.107(a)(4). Off-site facilities treating CAMU-eligible wastes to comply with  
 9791 this Section must comply with the requirements of 35 Ill. Adm. Code  
 9792 728.107(b)(4), except that the certification must be with respect to the treatment  
 9793 requirements of subsection (a)(2) of this Section.  
 9794  
 9795 g) For the purposes of this Section only, the "design of the CAMU" in Section  
 9796 724.652(e)(4)(E)(v) means design of the permitted Subtitle C landfill.  
 9797

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART W: DRIP PADS

**Section 724.670 Applicability**

- 9800  
 9801  
 9802  
 9803  
 9804 a) The requirements of this Subpart W apply to owners and operators of facilities  
 9805 that use new or existing drip pads to convey treated wood drippage, precipitation,  
 9806 or surface water run-on to an associated collection system.  
 9807  
 9808 1) "Existing drip pads" are the following:  
 9809  
 9810 A) Those constructed before December 6, 1990; and  
 9811

- 9812 B) Those for which the owner or operator had a design and had  
9813 entered into binding financial or other agreements for construction  
9814 prior to December 6, 1990.  
9815
- 9816 2) All other drip pads are "new drip pads-".  
9817
- 9818 3) The requirements at Section 724.673(b)(3) to install a leak collection  
9819 system applies only to those drip pads that were constructed after  
9820 December 24, 1992 except for those constructed after December 24, 1992  
9821 for which the owner or operator had a design and has entered into binding  
9822 financial or other agreements for construction prior to December 24, 1992.  
9823
- 9824 b) The owner or operator of any drip pad that is inside or under a structure that  
9825 provides protection from precipitation so that neither run-off nor run-on is  
9826 generated is not subject to regulation under Section 724.673(e) or (f).  
9827
- 9828 c) The requirements of this subsection (c) are not applicable to the management of  
9829 infrequent and incidental drippage in storage yards provided that the owner or  
9830 operator maintains and complies with a written contingency plan that describes  
9831 how the owner or operator will respond immediately to the discharge of  
9832 infrequent and incidental drippage. At a minimum, the contingency plan must  
9833 describe how the owner or operator will do the following:  
9834
- 9835 1) Clean up the drippage;  
9836
- 9837 2) Document the clean-up of the drippage;  
9838
- 9839 3) Retain documentation regarding the clean-up for three years; and  
9840
- 9841 4) Manage the contaminated media in a manner consistent with State and  
9842 federal regulations.  
9843

9844 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
9845

9846 **Section 724.671 Assessment of Existing Drip Pad Integrity**  
9847

- 9848 a) For each existing drip pad, the owner or operator must evaluate the drip pad and  
9849 determine whether it meets all of the requirements of this Subpart W, except the  
9850 requirements for liners and leak detection systems of Section 724.673(b). ~~The No~~  
9851 ~~later than June 6, 1991,~~ the owner or operator must obtain and keep on file at the  
9852 facility a written assessment of the drip pad, reviewed and certified by a qualified  
9853 Professional Engineer that attests to the results of the evaluation. The assessment  
9854 must be reviewed, updated, and re-certified annually until all upgrades, repairs or

9855 modifications necessary to achieve compliance with all the standards of Section  
9856 724.673 are complete. The evaluation must document the extent to which the drip  
9857 pad meets each of the design and operating standards of Section 724.673, except  
9858 the standards for liners and leak detection systems, specified in Section  
9859 724.673(b).

- 9860
- 9861 b) The owner or operator must develop a written plan for upgrading, repairing, and  
9862 modifying the drip pad to meet the requirements of Section 724.673(b) and  
9863 submit the plan to the Agency no later than two years before the date that all  
9864 repairs, upgrades and modifications will be complete. This written plan must  
9865 describe all changes to be made to the drip pad in sufficient detail to document  
9866 compliance with all the requirements of Section 724.673. The plan must be  
9867 reviewed and certified by a qualified Professional Engineer.
- 9868
- 9869 c) Upon completion of all upgrades, repairs, and modifications, the owner or  
9870 operator must submit to the Agency, the as-built drawings for the drip pad,  
9871 together with a certification by a qualified Professional Engineer attesting that the  
9872 drip pad conforms to the drawings.
- 9873
- 9874 d) If the drip pad is found to be leaking or unfit for use, the owner or operator must  
9875 comply with the provisions of Section 724.673(m) or close the drip pad in  
9876 accordance with Section 724.675.

9877  
9878 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
9879

9880 **Section 724.673 Design and Operating Requirements**

- 9881
- 9882 a) Drip pads must fulfill the following:
- 9883
- 9884 1) Not be constructed of non earthen materials, wood, or asphalt, unless the  
9885 asphalt is structurally supported;
- 9886
- 9887 2) Be sloped to free-drain to the associated collection system treated wood  
9888 drippage, rain, other waters, or solutions of drippage and water or other  
9889 wastes;
- 9890
- 9891 3) Have a curb or berm around the perimeter;
- 9892
- 9893 4) In addition, the drip pad must fulfill the following:
- 9894
- 9895 A) Have a hydraulic conductivity of less than or equal to  $1 \times 10^{-7}$   
9896 centimeters per second (cm/sec), e.g., existing concrete drip pads  
9897 must be sealed, coated, or covered with a surface material with a

9898 hydraulic conductivity of less than or equal to  $1 \times 10^{-7}$  cm/sec such  
9899 that the entire surface where drippage occurs or may run across is  
9900 capable of containing such drippage and mixtures of drippage and  
9901 precipitation, materials, or other wastes while being routed to an  
9902 associated collection system. This surface material must be  
9903 maintained free of cracks and gaps that could adversely affect its  
9904 hydraulic conductivity, and the material must be chemically  
9905 compatible with the preservatives that contact the drip pad. The  
9906 requirements of this provision apply only to the existing drip pads  
9907 and those drip pads for which the owner or operator elects to  
9908 comply with Section 724.672(b) instead of Section 724.672(a).  
9909

9910 B) The owner or operator must obtain and keep on file at the facility a  
9911 written assessment of the drip pad, reviewed and certified by a  
9912 qualified Professional Engineer that attests to the results of the  
9913 evaluation. The assessment must be reviewed, updated and  
9914 recertified annually. The evaluation must document the extent to  
9915 which the drip pad meets the design and operating standards of this  
9916 Section, except for in subsection (b) of this Section.  
9917

9918 5) Be of sufficient structural strength and thickness to prevent failure due to  
9919 physical contact, climatic conditions, the stress of installation, and the  
9920 stress of daily operations, e.g., variable and moving loads such as vehicle  
9921 traffic, movement of wood, etc.  
9922

9923 BOARD NOTE: In judging the structural integrity requirement of this  
9924 subsection (c), the Agency should generally consider applicable standards  
9925 established by professional organizations generally recognized by the  
9926 industry, including ACI 318 (Building Code Requirements for Reinforced  
9927 Concrete), or ASTM C 94-90 (Standard Specification for Ready-Mixed  
9928 Concrete), each incorporated by reference in 35 Ill. Adm. Code  
9929 720.111(a).  
9930

9931 b) If an owner or operator elects to comply with Section 724.672(a) instead of  
9932 Section 724.672(b), the drip pad must have the following:  
9933

9934 1) A synthetic liner installed below the drip pad that is designed, constructed,  
9935 and installed to prevent leakage from the drip pad into the adjacent  
9936 subsurface soil or groundwater or surface water at any time during the  
9937 active life (including the closure period) of the drip pad. The liner must be  
9938 constructed of materials that will prevent waste from being absorbed into  
9939 the liner and to prevent releases into the adjacent subsurface soil or  
9940 groundwater or surface water during the active life of the facility. The

9941 liner must fulfill the following:  
9942

9943 A) It must be constructed of materials that have appropriate chemical  
9944 properties and sufficient strength and thickness to prevent failure  
9945 due to pressure gradients (including static head and external  
9946 hydrogeologic forces), physical contact with the waste or drip pad  
9947 leakage to which they are exposed, climatic conditions, the stress  
9948 of installation and the stress of daily operation (including stresses  
9949 from vehicular traffic on the drip pad);  
9950

9951 B) It must be placed upon a foundation or base capable of providing  
9952 support to the liner and resistance to pressure gradients above and  
9953 below the liner to prevent failure of the liner due to settlement,  
9954 compression or uplift; and  
9955

9956 C) It must be installed to cover all surrounding earth that could come  
9957 in contact with the waste or leakage; and  
9958

9959 2) A leakage detection system immediately above the liner that is designed,  
9960 constructed, maintained, and operated to detect leakage from the drip pad.  
9961 The leakage detection system must fulfill the following:  
9962

9963 A) It must be constructed of materials that are as follows:  
9964

9965 i) Chemically resistant to the waste managed in the drip pad  
9966 and the leakage that might be generated; and  
9967

9968 ii) Of sufficient strength and thickness to prevent collapse  
9969 under the pressures exerted by overlaying materials and by  
9970 any equipment used at the drip pad; and  
9971

9972 B) It must be designed and operated to function without clogging  
9973 through the scheduled closure of the drip pad; and  
9974

9975 C) It must be designed so that it will detect the failure of the drip pad  
9976 or the presence of a release of hazardous waste or accumulated  
9977 liquid at the earliest practicable time.  
9978

9979 3) A leaking collection system immediately above the liner that is designed,  
9980 constructed, maintained, and operated to collect leakage from the drip pad  
9981 such that it can be removed from below the drip pad. The date, time, and  
9982 quantity of any leakage collected in this system and removed must be  
9983 documented in the operating log.

- 9984  
9985  
9986  
9987  
9988  
9989  
9990  
9991  
9992  
9993  
9994  
9995  
9996  
9997  
9998  
9999  
10000  
10001  
10002  
10003  
10004  
10005  
10006  
10007  
10008  
10009  
10010  
10011  
10012  
10013  
10014  
10015  
10016  
10017  
10018  
10019  
10020  
10021  
10022  
10023  
10024  
10025  
10026
- 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 sectionSection 3010 of RCRA (42 USC 6930).
  - 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 a qualified Professional Engineer certifying that the drip pad

- 10027 design meets the requirements of this Section.  
10028  
10029 h) Drillage and accumulated precipitation must be removed from the associated  
10030 collection system as necessary to prevent overflow onto the drip pad.  
10031  
10032 i) The drip surface must be cleaned thoroughly at least once every seven days such  
10033 that accumulated residues of hazardous waste or other materials are removed,  
10034 using an appropriate and effective cleaning technique, including but not limited  
10035 to, rinsing, washing with detergents or other appropriate solvents, or steam  
10036 cleaning. The owner or operator must document, in the facility's operating log, the  
10037 date and time of each cleaning and the cleaning procedure used.  
10038  
10039 j) Drip pads must be operated and maintained in a manner to minimize tracking of  
10040 hazardous waste or hazardous waste constituents off the drip pad as a result of  
10041 activities by personnel or equipment.  
10042  
10043 k) After being removed from the treatment vessel, treated wood from pressure and  
10044 non-pressure processes must be held on the drip pad until drillage has ceased.  
10045 The owner or operator must maintain records sufficient to document that all  
10046 treated wood is held on the pad, in accordance with this Section, following  
10047 treatment.  
10048  
10049 l) Collection and holding units associated with run-on and run-off control systems  
10050 must be emptied or otherwise managed as soon as possible after storms to  
10051 maintain design capacity of the system.  
10052  
10053 m) Throughout the active life of the drip pad and as specified in the permit, if the  
10054 owner or operator detects a condition that could lead to or has caused a release of  
10055 hazardous waste, the condition must be repaired within a reasonably prompt  
10056 period of time following discovery, in accordance with the following procedures:  
10057  
10058 1) Upon detection of a condition that may have caused or has caused a  
10059 release of hazardous waste (e.g., upon detection of leakage in the leak  
10060 detection system), the owner or operator must do the following:  
10061  
10062 A) Enter a record of the discovery in the facility operating log;  
10063  
10064 B) Immediately remove from service the portion of the drip pad  
10065 affected by the condition;  
10066  
10067 C) Determine what steps must be taken to repair the drip pad, clean up  
10068 any leakage from below the drip pad, and establish a schedule for  
10069 accomplishing the clean up and repairs;

10070  
10071  
10072  
10073  
10074  
10075  
10076  
10077  
10078  
10079  
10080  
10081  
10082  
10083  
10084  
10085  
10086  
10087  
10088  
10089  
10090  
10091  
10092  
10093  
10094  
10095  
10096  
10097  
10098  
10099  
10100  
10101  
10102  
10103  
10104  
10105  
10106  
10107  
10108  
10109  
10110  
10111  
10112

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 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 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 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.675 Closure**

a) At closure, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment, as required in subsection (a) of this Section, the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated, the operator must close the unit and perform post-

closure care in accordance with closure and post-closure care requirements that apply to landfills (Section 724.410). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purposes of closure, post-closure , and financial responsibility, such a drip pad is then considered to be a landfill, and the owner or operator must meet all of the requirements for landfills specified in Subparts G and H of this Part.

c) Existing drip pads without liners.

1) The owner or operator of an existing drip pad that does not comply with the liner requirements of Section 724.673(b)(1) must do the following:

A) Include in the closure plan for the drip pad under Section 724.212 both a plan for complying with subsection (a) of this Section and a contingent plan for complying with subsection (b) of this Section in case not all contaminated subsoils can be practicably removed at closure; and

B) Prepare a contingent post-closure plan under Section 724.218 for complying with subsection (b) of this Section in case not all contaminated subsoils can be practicably removed at closure.

2) The cost estimates calculated under Sections 724.212 and 724.244 for closure and post closure care of a drip pad subject to this subsection (c) must include the cost of complying with the contingent closure plan and the contingent post-closure plan, but are not required to include the cost of expected closure under subsection (a) of this Section.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART X: MISCELLANEOUS UNITS

**Section 724.701 Environmental Performance Standards**

A miscellaneous unit must be located, designed, constructed, operated, maintained, and closed in a manner that will ensure adequate protection of human health and the environment. Permits for miscellaneous units are to contain such terms and provisions as are necessary to adequately protect human health and the environment, including, but not limited to, as appropriate, design and operating requirements, detection and monitoring requirements, and requirements for responses to releases of hazardous waste or hazardous constituents from the unit. Permit terms and provisions must include those requirements of Subparts I through O and AA through CC of this Part; 35 Ill. Adm. Code 702, 703, and 730; and federal subpart EEE of 40 CFR 63, incorporated by reference in 35 Ill. Adm. Code 720.111(b), that are appropriate for the

10156 miscellaneous unit being permitted. Adequate protection of human health and the environment  
10157 includes, but is not limited to the following:

10158  
10159  
10160  
10161  
10162  
10163  
10164  
10165  
10166  
10167  
10168  
10169  
10170  
10171  
10172  
10173  
10174  
10175  
10176  
10177  
10178  
10179  
10180  
10181  
10182  
10183  
10184  
10185  
10186  
10187  
10188  
10189  
10190  
10191  
10192  
10193  
10194  
10195  
10196  
10197  
10198

- a) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in the groundwater or subsurface environment, considering the following:
  - 1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for migration through soil, liners, or other containing structures;
  - 2) The hydrologic and geologic characteristics of the unit and the surrounding area;
  - 3) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater;
  - 4) The quantity and direction of groundwater flow;
  - 5) The proximity to and withdrawal rates of current and potential groundwater users;
  - 6) The patterns of land use in the region;
  - 7) The potential for deposition or migration of waste constituents into subsurface physical structures and the root zone of food-chain crops and other vegetation;
  - 8) The potential for health risks caused by human exposure to waste constituents; and
  - 9) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
  
- b) Prevention of any releases that may have adverse effects on human health or the environment due to migration of waste constituents in surface water, in wetlands, or on the soil surface, considering the following:
  - 1) The volume and physical and chemical characteristics of the waste in the unit;
  - 2) The effectiveness and reliability of containing, confining, and collecting systems and structures in preventing migration;

- 10199
  - 10200
  - 10201
  - 10202
  - 10203
  - 10204
  - 10205
  - 10206
  - 10207
  - 10208
  - 10209
  - 10210
  - 10211
  - 10212
  - 10213
  - 10214
  - 10215
  - 10216
  - 10217
  - 10218
  - 10219
  - 10220
  - 10221
  - 10222
  - 10223
  - 10224
  - 10225
  - 10226
  - 10227
  - 10228
  - 10229
  - 10230
  - 10231
  - 10232
  - 10233
  - 10234
  - 10235
  - 10236
  - 10237
  - 10238
  - 10239
  - 10240
  - 10241
- 3) The hydrologic characteristics of the unit and surrounding area, including the topography of the land around the unit;
  - 4) The patterns of precipitation in the region;
  - 5) The quantity, quality, and direction of groundwater flow;
  - 6) The proximity of the unit to surface waters;
  - 7) The current and potential uses of the nearby surface waters and any water quality standards in 35 Ill. Adm. Code 302 or 303;
  - 8) The existing quality of surface waters and surface soils, including other sources of contamination and their cumulative impact on surface waters and surface soils;
  - 9) The patterns of land use in the region;
  - 10) The potential for health risks caused by human exposure to waste constituents; and
  - 11) The potential for damage to domestic animals, wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents.
- c) Prevention of any release that may have adverse effects on human health or the environment due to migration of waste constituents in the air, considering the following:
- 1) The volume and physical and chemical characteristics of the waste in the unit, including its potential for the emission and dispersal of gases, aerosols, and particulates;
  - 2) The effectiveness and reliability of systems and structures to reduce or prevent emissions of hazardous constituents to the air;
  - 3) The operating characteristics of the unit;
  - 4) The atmospheric, meteorologic, and topographic characteristics of the unit and the surrounding area;
  - 5) The existing quality of the air, including other sources of contamination and their cumulative impact on the air;

- 10242
- 10243
- 10244 6) The potential for health risks caused by human exposure to waste
- 10245 constituents; and
- 10246
- 10247 7) The potential for damage to domestic animals, wildlife, crops, vegetation,
- 10248 and physical structures caused by waste constituents.

10249 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

10250

10251 SUBPART AA: AIR EMISSION STANDARDS FOR PROCESS VENTS

10252

10253 **Section 724.930 Applicability**

10254

- 10255 a) This Subpart AA applies to owners and operators of facilities that treat, store, or
- 10256 dispose of hazardous wastes (except as provided in Section 724.101).
- 10257
- 10258 b) Except for Sections 724.934(d) and (e), this Subpart AA applies to process vents
- 10259 associated with distillation, fractionation, thin-film evaporation, solvent
- 10260 extraction, or air or steam stripping operations that manage hazardous wastes with
- 10261 organic concentrations of at least 10 ppmw (parts per million by weight), if these
- 10262 operations are conducted as follows:
- 10263
- 10264 1) In units that are subject to the permitting requirements of 35 Ill. Adm.
- 10265 Code 703;
- 10266
- 10267 2) In a unit (including a hazardous waste recycling unit) that is not exempt
- 10268 from permitting under the provisions of 35 Ill. Adm. Code
- 10269 262.117722-134(a) (i.e., a hazardous waste recycling unit that is not a 90-
- 10270 day tank or container) and that is located at a hazardous waste
- 10271 management facility otherwise subject to the permitting requirements of
- 10272 35 Ill. Adm. Code 703; or
- 10273
- 10274 3) In a unit that is exempt from permitting under the provisions of 35 Ill.
- 10275 Adm. Code 262.117722-134(a) (i.e., a 90-day tank or container) and which
- 10276 is not a recycling unit under the provisions of 35 Ill. Adm. Code 721.106.
- 10277
- 10278 c) ~~For the owner and operator of a facility subject to this Subpart AA that received a~~
- 10279 ~~final permit under 35 Ill. Adm. Code 702, 703, and 705 prior to December 6,~~
- 10280 ~~1996, the requirements of this Subpart AA must be incorporated into the permit~~
- 10281 ~~when the permit is reissued, renewed, or modified in accordance with the~~
- 10282 ~~requirements of 35 Ill. Adm. Code 703 and 705. Until such date when the owner~~
- 10283 ~~and operator receives a final permit incorporating the requirements of this Subpart~~
- 10284 ~~AA, the owner and operator is subject to the requirements of Subpart AA of 35~~

10285 Ill. Adm. Code 725.  
 10286

10287 BOARD NOTE: The requirements of Sections 724.932 through 724.936 apply to  
 10288 process vents on hazardous waste recycling units previously exempt under 35 Ill.  
 10289 Adm. Code 721.106(c)(1). Other exemptions under 35 Ill. Adm. Code 721.104  
 10290 and 724.101(g) are not affected by these requirements.  
 10291

10292 d) This subsection (d) corresponds with 40 CFR 264.1030(d), which is marked  
 10293 "reserved" by USEPA. This statement maintains structural consistency with  
 10294 USEPA rules.  
 10295

10296 e) The requirements of this Subpart AA do not apply to the process vents at a facility  
 10297 where the facility owner or operator certifies that all of the process vents that  
 10298 would otherwise be subject to this Subpart AA are equipped with and operating  
 10299 air emission controls in accordance with the process vent requirements of an  
 10300 applicable federal Clean Air Act regulation codified under 40 CFR 60, 61, or 63.  
 10301 The documentation of compliance under regulations at 40 CFR 60, 61, or 63 must  
 10302 be kept with, or made readily available with, the facility operating record.  
 10303

10304 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 10305

10306 **Section 724.931 Definitions**  
 10307

10308 As used in this Subpart AA, all terms not defined in this Subpart AA have the meaning given  
 10309 them in section 1004 of the Resource Conservation and Recovery Act, incorporated by reference  
 10310 in 35 Ill. Adm. Code 720.111, and 35 Ill. Adm. Code 720 through 728, and 738.  
 10311

10312 "Air stripping operation" means a desorption operation employed to transfer one  
 10313 or more volatile components from a liquid mixture into a gas (air) either with or  
 10314 without the application of heat to the liquid. Packed towers, spray towers and  
 10315 bubble-cap, sieve, or valve-type plate towers are among the process  
 10316 configurations used for contacting the air and a liquid.  
 10317

10318 "Bottoms receiver" means a container or tank used to receive and collect the  
 10319 heavier bottoms fractions of the distillation feed stream that remain in the liquid  
 10320 phase.  
 10321

10322 "Btu" means British thermal unit.  
 10323

10324 "Closed-vent system" means a system that is not open to the atmosphere and that  
 10325 is composed of piping, connections, and, if necessary, flow-inducing devices that  
 10326 transport gas or vapor from a piece or pieces of equipment to a control device.  
 10327

- 10328 "Condenser" means a heat-transfer device that reduces a thermodynamic fluid  
10329 from its vapor phase to its liquid phase.  
10330
- 10331 "Connector" means flanged, screwed, welded, or other joined fittings used to  
10332 connect two pipelines or a pipeline and a piece of equipment. For the purposes of  
10333 reporting and recordkeeping, "connector" means flanged fittings that are not  
10334 covered by insulation or other materials that prevent location of the fittings.  
10335
- 10336 "Continuous recorder" means a data-recording device recording an instantaneous  
10337 data value at least once every 15 minutes.  
10338
- 10339 "Control device" means an enclosed combustion device, vapor recovery system,  
10340 or flare. Any device the primary function of which is the recovery or capture of  
10341 solvents or other organics for use, reuse, or sale (e.g., a primary condenser on a  
10342 solvent recovery unit) is not a control device.  
10343
- 10344 "Control device shutdown" means the cessation of operation of a control device  
10345 for any purpose.  
10346
- 10347 "Distillate receiver" means a container or tank used to receive and collect liquid  
10348 material (condensed) from the overhead condenser of a distillation unit and from  
10349 which the condensed liquid is pumped to larger storage tanks or other process  
10350 units.  
10351
- 10352 "Distillation operation" means an operation, either batch or continuous, separating  
10353 one or more feed streams into two or more exit streams, each exit stream having  
10354 component concentrations different from those in the feed streams. The  
10355 separation is achieved by the redistribution of the components between the liquid  
10356 and vapor phase as they approach equilibrium within the distillation unit.  
10357
- 10358 "Double block and bleed system" means two block valves connected in series  
10359 with a bleed valve or line that can vent the line between the two block valves.  
10360
- 10361 "Equipment" means each valve, pump, compressor, pressure relief device,  
10362 sampling connection system, open-ended valve or line, flange or other connector,  
10363 and any control devices or systems required by this Subpart AA.  
10364
- 10365 "First attempt at repair" means to take rapid action for the purpose of stopping or  
10366 reducing leakage of organic material to the atmosphere using best practices.  
10367
- 10368 "Flame zone" means the portion of the combustion chamber in a boiler occupied  
10369 by the flame envelope.  
10370

10371 "Flow indicator" means a device that indicates whether gas flow is present in a  
10372 vent stream.  
10373  
10374 "Fractionation operation" means a distillation operation or method used to  
10375 separate a mixture of several volatile components of different boiling points in  
10376 successive stages, each stage removing from the mixture some proportion of one  
10377 of the components.  
10378  
10379 "ft" means foot.  
10380  
10381 "h" means hour.  
10382  
10383 "Hazardous waste management unit shutdown" means a work practice or  
10384 operational procedure that stops operation of a hazardous waste management unit  
10385 or part of a hazardous waste management unit. An unscheduled work practice or  
10386 operational procedure that stops operation of a hazardous waste management unit  
10387 or part of a hazardous waste management unit for less than 24 hours is not a  
10388 hazardous waste management unit shutdown. The use of spare equipment and  
10389 technically feasible bypassing of equipment without stopping operation are not  
10390 hazardous waste management unit shutdowns.  
10391  
10392 "Hot well" means a container for collecting condensate as in a steam condenser  
10393 serving a vacuum-jet or steam-jet ejector.  
10394  
10395 "In gas-vapor service" means that the piece of equipment contains or contacts a  
10396 hazardous waste stream that is in the gaseous state at operating conditions.  
10397  
10398 "In heavy liquid service" means that the piece of equipment is not in gas-vapor  
10399 service or in light liquid service.  
10400  
10401 "In light liquid service" means that the piece of equipment contains or contacts a  
10402 waste stream where the vapor pressure of one or more of the organic components  
10403 in the stream is greater than 0.3 kilopascals (kPa) at 20° C, the total concentration  
10404 of the pure organic components having a vapor pressure greater than 0.3 kPa at  
10405 20° C-is equal to or greater than 20 percent by weight, and the fluid is a liquid at  
10406 operating conditions.  
10407  
10408 "In situ sampling systems" means nonextractive samplers or in-line samplers.  
10409  
10410 "In vacuum service" means that equipment is operating at an internal pressure that  
10411 is at least 5 kPa below ambient pressure.  
10412  
10413 "Kg" means kilogram.

10414  
10415 "kPa" means kilopascals.  
10416  
10417 "lb" means pound.  
10418  
10419 "m" means meter.  
10420  
10421 "Mg" means Megagrams, or metric tonnes.  
10422  
10423 "MJ" means Megajoules, or ten to the sixth Joules.  
10424  
10425 "MW" means Megawatts.  
10426  
10427 "Malfunction" means any sudden failure of a control device or a hazardous waste  
10428 management unit or failure of a hazardous waste management unit to operate in a  
10429 normal or usual manner, so that organic emissions are increased.  
10430  
10431 "Open-ended valve or line" means any valve, except a pressure relief valve, that  
10432 has one side of the valve seat in contact with hazardous waste and one side open  
10433 to the atmosphere, either directly or through open piping.  
10434  
10435 "ppmv" means parts per million by volume.  
10436  
10437 "ppmw" means parts per million by weight.  
10438  
10439 "Pressure release" means the emission of materials resulting from the system  
10440 pressure being greater than the set pressure of the pressure relief device.  
10441  
10442 "Process heater" means a device that transfers heat liberated by burning fuel to  
10443 fluids contained in tubes, including all fluids except water that are heated to  
10444 produce steam.  
10445  
10446 "Process vent" means any open-ended pipe or stack that is vented to the  
10447 atmosphere either directly, through a vacuum-producing system, or through a tank  
10448 (e.g., distillate receiver, condenser, bottoms receiver, surge control tank, separator  
10449 tank, or hot well) associated with hazardous waste distillation, fractionation, thin-  
10450 film evaporation, solvent extraction, or air or steam stripping operations.  
10451  
10452 "Repaired" means that equipment is adjusted or otherwise altered to eliminate a  
10453 leak.  
10454  
10455 "s" means second.  
10456

10457 "Sampling connection system" means an assembly of equipment within a process  
10458 or waste management unit that is used during periods of representative operation  
10459 to take samples of the process or waste fluid. Equipment that is used to take non-  
10460 routine grab samples is not considered a sampling connection system.  
10461  
10462 "scm" means standard cubic meter.  
10463  
10464 "scft" means standard cubic foot.  
10465  
10466 "Sensor" means a device that measures a physical quantity or the change in a  
10467 physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.  
10468  
10469 "Separator tank" means a device used for separation of two immiscible liquids.  
10470  
10471 "Solvent extraction operation" means an operation or method of separation in  
10472 which a solid or solution is contacted with a liquid solvent (the two being  
10473 mutually insoluble) to preferentially dissolve and transfer one or more  
10474 components into the solvent.  
10475  
10476 "Startup" means the setting in operation of a hazardous waste management unit or  
10477 control device for any purpose.  
10478  
10479 "Steam stripping operation" means a distillation operation in which vaporization  
10480 of the volatile constituents of a liquid mixture takes place by the introduction of  
10481 steam directly in to the charge.  
10482  
10483 "Surge control tank" means a large-sized pipe or storage reservoir sufficient to  
10484 contain the surging liquid discharge of the process tank to which it is connected.  
10485  
10486 "Thin-film evaporation operation" means a distillation operation that employs a  
10487 heating surface consisting of a large diameter tube that may be either straight or  
10488 tapered, horizontal or vertical. Liquid is spread on the tube wall by a rotating  
10489 assembly of blades that maintain a close clearance from the wall or actually ride  
10490 on the film of liquid on the wall.  
10491  
10492 "USDOT" means the United States Department of Transportation.  
10493  
10494 "Vapor incinerator" means any enclosed combustion device that is used for  
10495 destroying organic compounds and does not extract energy in the form of steam  
10496 or process heat.  
10497  
10498 "Vented" means discharged through an opening, typically an open-ended pipe or  
10499 stack, allowing the passage of a stream of liquids, gases, or fumes into the

10500 atmosphere. The passage of liquids, gases, or fumes is caused by mechanical  
10501 means, such as compressors or vacuum-producing systems, or by process-related  
10502 means, such as evaporation produced by heating, and not caused by tank loading  
10503 and unloading (working losses) or by natural means, such as diurnal temperature  
10504 changes.

10505  
10506 "yr" means year.

10507  
10508 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
10509

10510 **Section 724.932 Standards: Process Vents**

- 10511
- 10512 a) The owner or operator of a facility with process vents associated with distillation,  
10513 fractionation, thin-film evaporation, solvent extraction, or air or steam stripping  
10514 operations managing hazardous wastes with organic concentrations of at least 10  
10515 ppmw must do either of the following:  
10516
    - 10517 1) Reduce total organic emissions from all affected process vents at the  
10518 facility below 1.4 kg/h (3 lb/h) and 2.8 Mg/yr (3.1 tons/yr); or
    - 10519 2) Reduce, by use of a control device, total organic emissions from all  
10520 affected process vents at the facility by 95 weight percent.  
10521
  - 10522 b) If the owner or operator installs a closed-vent system and control device to  
10523 comply with the provisions of subsection (a) of this Section, the closed-vent  
10524 system and control device must meet the requirements of Section 724.933.  
10525
  - 10526 c) Determinations of vent emissions and emission reductions or total organic  
10527 compound concentrations achieved by add-on control devices must be either  
10528 based on engineering calculations or performance tests. If performance tests are  
10529 used to determine vent emissions, emission reductions, or total organic compound  
10530 concentrations achieved by add-on control devices, the performance tests must  
10531 conform with the requirements of Section 724.934(c).  
10532
  - 10533 d) When an owner or operator and the Agency do not agree on determinations of  
10534 vent emissions or emission reductions or total organic compound concentrations  
10535 achieved by add-on control devices based on engineering calculations, the  
10536 procedures in Section 724.934(c) must be used to resolve the disagreement.  
10537

10538  
10539 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
10540

10541 **Section 724.933 Standards: Closed-Vent Systems and Control Devices**

10542

- 10543 a) Compliance Required.  
10544  
10545 1) Owners or operators of closed-vent systems and control devices used to  
10546 comply with provisions of this Part must comply with the provisions of  
10547 this Section.  
10548  
10549 2) Implementation Schedule.  
10550  
10551 A) The owner or operator of an existing facility that cannot install a  
10552 closed-vent system and control device to comply with the  
10553 provisions of this Subpart AA on the effective date that the facility  
10554 becomes subject to the provisions of this Subpart AA must prepare  
10555 an implementation schedule that includes dates by which the  
10556 closed-vent system and control device will be installed and in  
10557 operation. The controls must be installed as soon as possible, but  
10558 the implementation schedule may allow up to 30 months after the  
10559 effective date that the facility becomes subject to this Subpart AA  
10560 for installation and startup.  
10561  
10562 B) Any unit ~~beginning~~that began operation ~~that is~~after December 21,  
10563 ~~1990 and which~~ was subject to the provisions of this Subpart AA  
10564 when operation ~~begins~~began must comply with the rules  
10565 immediately (i.e., must have control devices installed and  
10566 operating on startup of the affected unit); the 30-month  
10567 implementation schedule does not apply.  
10568  
10569 C) The owner or operator of any facility in existence on the effective  
10570 date of a statutory or regulatory amendment that renders the  
10571 facility subject to this Subpart AA must comply with all  
10572 requirements of this Subpart AA as soon as practicable, but no  
10573 later than 30 months after the effective date of the amendment.  
10574 When control equipment required by this Subpart AA cannot be  
10575 installed and begin operation by the effective date of the  
10576 amendment, the facility owner or operator must prepare an  
10577 implementation schedule that includes the following information:  
10578 specific calendar dates for award of contracts or issuance of  
10579 purchase orders for the control equipment, initiation of on-site  
10580 installation of the control equipment, completion of the control  
10581 equipment installation, and performance of any testing to  
10582 demonstrate that the installed equipment meets the applicable  
10583 standards of this Subpart AA. The owner or operator must enter  
10584 the implementation schedule in the operating record or in a  
10585 permanent, readily available file located at the facility.

- 10586  
 10587  
 10588  
 10589  
 10590  
 10591  
 10592  
 10593  
 10594  
 10595
- D) An owner or operator of a facility or unit that becomes newly subject to the requirements of this Subpart AA after ~~December 8, 1997,~~ due to an action other than those described in subsection (a)(2)(C) ~~of this Section,~~ must comply with all applicable requirements immediately (i.e., the facility or unit must have control devices installed and operating on the date the facility or unit becomes subject to this Subpart AA; the 30-month implementation schedule does not apply).
- 10596  
 10597  
 10598  
 10599  
 10600  
 10601
- b) A control device involving vapor recovery (e.g., a condenser or adsorber) must be designed and operated to recover the organic vapors vented to it with an efficiency of 95 weight percent or greater unless the total organic emission limits of Section 724.932(a)(1) for all affected process vents is attained at an efficiency less than 95 weight percent.
- 10602  
 10603  
 10604  
 10605  
 10606  
 10607  
 10608  
 10609  
 10610
- c) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) must be designed and operated to reduce the organic emissions vented to it by 95 weight percent or greater; to achieve a total organic compound concentration of 20 ppmv, expressed as the sum of the actual compounds and not in carbon equivalents, on a dry basis, corrected to three percent oxygen; or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760° C. If a boiler or process heater is used as the control device, then the vent stream must be introduced into the flame zone of the boiler or process heater.
- 10611  
 10612
- d) Flares.
- 10613  
 10614  
 10615  
 10616  
 10617
- 1) A flare must be designed for and operated with no visible emissions, as determined by the methods specified in subsection (e)(1), except for periods not to exceed a total of five minutes during any two consecutive hours.
- 10618  
 10619  
 10620
- 2) A flare must be operated with a flame present at all times, as determined by the methods specified in subsection (f)(2)(C).
- 10621  
 10622  
 10623  
 10624  
 10625  
 10626  
 10627  
 10628
- 3) A flare must be used only if the net heating value of the gas being combusted is 11.2 MJ/scm (300 Btu/scf) or greater and the flare is steam-assisted or air-assisted or if the net heating value of the gas being combusted is 7.45 MJ/scm (200 Btu/scf) or greater and the flare is nonassisted. The net heating value of the gas being combusted must be determined by the methods specified in subsection (e)(2).
- 4) Exit Velocity.

10629  
 10630  
 10631  
 10632  
 10633  
 10634  
 10635  
 10636  
 10637  
 10638  
 10639  
 10640  
 10641  
 10642  
 10643  
 10644  
 10645  
 10646  
 10647  
 10648  
 10649  
 10650  
 10651  
 10652  
 10653  
 10654  
 10655  
 10656  
 10657  
 10658  
 10659  
 10660  
 10661  
 10662  
 10663  
 10664  
 10665

- A) A steam-assisted or nonassisted flare must be designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), less than 18.3 m/s (60 ft/s), except as provided in subsections (d)(4)(B) and (d)(4)(C).
  - B) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), equal to or greater than 18.3 m/s (60 ft/s) but less than 122 m/s (400 ft/s) is allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
  - C) A steam-assisted or nonassisted flare designed for and operated with an exit velocity, as determined by the methods specified in subsection (e)(3), less than the velocity, V, as determined by the method specified in subsection (e)(4), and less than 122 m/s (400 ft/s) is allowed.
- 5) An air-assisted flare must be designed and operated with an exit velocity less than the velocity, V, as determined by the method specified in subsection (e)(5).
  - 6) A flare used to comply with this Section must be steam-assisted, air-assisted, or nonassisted.
- e) Compliance Determination and Equations.
- 1) Reference 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), must be used to determine the compliance of a flare with the visible emission provisions of this Subpart AA. The observation period is two hours and must be used according to Reference Method 22.
  - 2) The net heating value of the gas being combusted in a flare must be calculated using the following equation:

$$H_T = K \times \sum_{i=1}^n C_i \times H_i$$

10666  
 10667  
 10668

Where:

- $H_T$  = the net heating value of the sample in MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25° C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20° C;
- $K$  =  $1.74 \times 10^{-7}$  (1/ppm)(g mol/scm)(MJ/kcal) where the standard temperature for (g mol/scm) is 20° C;
- $C_i$  = the concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 (Measurement of Gaseous Organic Compound Emissions by Gas Chromatography) in appendix A to 40 CFR 60 (Test Methods), and for carbon monoxide, by ASTM D 1946-90 (Standard Practice for Analysis of Reformed Gas by Gas Chromatography), each incorporated by reference in 35 Ill. Adm. Code 720.111; and
- $H_i$  = the net heat of combustion of sample component i, kcal/gmol at 25° C and 760 mm Hg. The heats of combustion must be determined using ASTM D 2382-88 (Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method)), incorporated by reference in 35 Ill. Adm. Code 720.111(a), if published values are not available or cannot be calculated.

- 10669
  - 10670
  - 10671
  - 10672
  - 10673
  - 10674
  - 10675
  - 10676
  - 10677
  - 10678
  - 10679
  - 10680
  - 10681
  - 10682
  - 10683
- 3) The actual exit velocity of a flare must be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Methods 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)), 2A (Direct Measurement of Gas Volume through Pipes and Small Ducts), 2C (Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)), or 2D (Measurement of Gas Volume Flow Rates in Small Pipes and Ducts) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b), as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.
  - 4) The maximum allowed velocity in m/s,  $V_{max}$ , for a flare complying with subsection (d)(4)(C) must be determined by the following equation:

$$\log_{10}(V_{max}) = \frac{H_T + 28.8}{31.7}$$

- 10684
  - 10685
  - 10686
- Where:

$H_T$  = the net heating value as determined in subsection (e)(2).

10687

10688 5) The maximum allowed velocity in m/s,  $V_{\max}$ , for an air-assisted flare must  
10689 be determined by the following equation:  
10690

$$V_{\max} = 8.706 + 0.7084 H_T$$

10691  
10692 Where:  
10693

$H_T$  = the net heating value as determined in subsection (e)(2).

10694  
10695 f) The owner or operator must monitor and inspect each control device required to  
10696 comply with this Section to ensure proper operation and maintenance of the  
10697 control device by implementing the following requirements:  
10698

10699 1) Install, calibrate, maintain, and operate according to the manufacturer's  
10700 specifications a flow indicator that provides a record of stream flow from  
10701 each affected process vent to the control device at least once every hour.  
10702 The flow indicator sensor must be installed in the vent stream at the  
10703 nearest feasible point to the control device inlet but before the point at  
10704 which the vent streams are combined.

10705  
10706 2) Install, calibrate, maintain, and operate according to the manufacturer's  
10707 specifications a device to continuously monitor control device operation,  
10708 as follows:

10709  
10710 A) For a thermal vapor incinerator, a temperature monitoring device  
10711 equipped with a continuous recorder. The device must have  
10712 accuracy of  $\pm 1$  percent of the temperature being monitored in  $^{\circ}\text{C}$  or  
10713  $\pm 0.5^{\circ}\text{C}$ , whichever is greater. The temperature sensor must be  
10714 installed at a location in the combustion chamber downstream of  
10715 the combustion zone.

10716  
10717 B) For a catalytic vapor incinerator, a temperature monitoring device  
10718 equipped with a continuous recorder. The device must be capable  
10719 of monitoring temperature at two locations and have an accuracy  
10720 of  $\pm 1$  percent of the temperature being monitored in  $^{\circ}\text{C}$  or  $\pm 0.5^{\circ}\text{C}$ ,  
10721 whichever is greater. One temperature sensor must be installed in  
10722 the vent stream at the nearest feasible point to the catalyst bed inlet  
10723 and a second temperature sensor must be installed in the vent  
10724 stream at the nearest feasible point to the catalyst bed outlet.

10725  
10726 C) For a flare, a heat sensing monitoring device equipped with a  
10727 continuous recorder that indicates the continuous ignition of the  
10728 pilot flame.

- 10729
  - 10730
  - 10731
  - 10732
  - 10733
  - 10734
  - 10735
  - 10736
  - 10737
  - 10738
  - 10739
  - 10740
  - 10741
  - 10742
  - 10743
  - 10744
  - 10745
  - 10746
  - 10747
  - 10748
  - 10749
  - 10750
  - 10751
  - 10752
  - 10753
  - 10754
  - 10755
  - 10756
  - 10757
  - 10758
  - 10759
  - 10760
  - 10761
  - 10762
  - 10763
  - 10764
  - 10765
  - 10766
  - 10767
  - 10768
  - 10769
  - 10770
  - 10771
- D) For a boiler or process heater having a design heat input capacity less than 44 MW, a temperature monitoring device equipped with a continuous recorder. The device must have an accuracy of  $\pm 1$  percent of the temperature being monitored in  $^{\circ}\text{C}$  or  $\pm 0.5^{\circ}\text{C}$ , whichever is greater. The temperature sensor must be installed at a location in the furnace downstream of the combustion zone.
- E) For a boiler or process heater having a design heat input capacity greater than or equal to 44 MW, a monitoring device equipped with a continuous recorder to measure parameters that indicate good combustion operating practices are being used.
- F) For a condenser, either of the following:
- i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the condenser; or
  - ii) A temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of  $\pm 1$  percent of the temperature being monitored in  $^{\circ}\text{C}$  or  $\pm 0.5^{\circ}\text{C}$ , whichever is greater. The temperature sensor must be installed at a location in the exhaust vent stream from the condenser exit (i.e., product side).
- G) For a carbon adsorption system that regenerates the carbon bed directly in the control device such as a fixed-bed carbon adsorber, either of the following:
- i) A monitoring device equipped with a continuous recorder to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed, or
  - ii) A monitoring device equipped with a continuous recorder to measure a parameter that indicates the carbon bed is regenerated on a regular, predetermined time cycle.
- 3) Inspect the readings from each monitoring device required by subsections (f)(1) and (f)(2) at least once each operating day to check control device

10772 operation and, if necessary, immediately implement the corrective  
 10773 measures necessary to ensure the control device operates in compliance  
 10774 with the requirements of this Section.  
 10775

10776 g) An owner or operator using a carbon adsorption system such as a fixed-bed  
 10777 carbon adsorber that regenerates the carbon bed directly onsite in the control  
 10778 device must replace the existing carbon in the control device with fresh carbon at  
 10779 a regular, predetermined time interval that is no longer than the carbon service life  
 10780 established as a requirement of Section 724.935(b)(4)(C)(vi).  
 10781

10782 h) An owner or operator using a carbon adsorption system such as a carbon canister  
 10783 that does not regenerate the carbon bed directly onsite in the control device must  
 10784 replace the existing carbon in the control device with fresh carbon on a regular  
 10785 basis by using one of the following procedures:  
 10786

10787 1) Monitor the concentration level of the organic compounds in the exhaust  
 10788 vent stream from the carbon adsorption system on a regular schedule, and  
 10789 replace the existing carbon with fresh carbon immediately when carbon  
 10790 breakthrough is indicated. The monitoring frequency must be daily or at  
 10791 an interval no greater than 20 percent of the time required to consume the  
 10792 total carbon working capacity established as a requirement of Section  
 10793 724.935(b)(4)(C)(vii), whichever is longer.  
 10794

10795 2) Replace the existing carbon with fresh carbon at a regular, predetermined  
 10796 time interval that is less than the design carbon replacement interval  
 10797 established as a requirement of Section 724.935(b)(4)(C)(vii).  
 10798

10799 i) An alternative operational or process parameter may be monitored if the operator  
 10800 demonstrates that the parameter will ensure that the control device is operated in  
 10801 conformance with these standards and the control device's design specifications.  
 10802

10803 j) An owner or operator of an affected facility seeking to comply with the provisions  
 10804 of this Part by using a control device other than a thermal vapor incinerator,  
 10805 catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon  
 10806 adsorption system is required to develop documentation including sufficient  
 10807 information to describe the control device operation and identify the process  
 10808 parameter or parameters that indicate proper operation and maintenance of the  
 10809 control device.  
 10810

10811 k) A closed-vent system must meet either of the following design requirements:  
 10812

10813 1) A closed-vent system must be designed to operate with no detectable  
 10814 emissions, as indicated by an instrument reading of less than 500 ppmv

- 10815 above background, as determined by the methods specified at Section  
10816 724.934(b), and by visual inspections; or  
10817  
10818 2) A closed-vent system must be designed to operate at a pressure below  
10819 atmospheric pressure. The system must be equipped with at least one  
10820 pressure gauge or other pressure measurement device that can be read  
10821 from a readily accessible location to verify that negative pressure is being  
10822 maintained in the closed-vent system when the control device is operating.  
10823  
10824 l) The owner or operator must monitor and inspect each closed-vent system required  
10825 to comply with this Section to ensure proper operation and maintenance of the  
10826 closed-vent system by implementing the following requirements:  
10827  
10828 1) Each closed-vent system that is used to comply with subsection (k)(1)  
10829 must be inspected and monitored in accordance with the following  
10830 requirements:  
10831  
10832 A) An initial leak detection monitoring of the closed-vent system must  
10833 be conducted by the owner or operator on or before the date that  
10834 the system becomes subject to this Section. The owner or operator  
10835 must monitor the closed-vent system components and connections  
10836 using the procedures specified in Section 724.934(b) to  
10837 demonstrate that the closed-vent system operates with no  
10838 detectable emissions, as indicated by an instrument reading of less  
10839 than 500 ppmv above background.  
10840  
10841 B) After initial leak detection monitoring required in subsection  
10842 (l)(1)(A), the owner or operator must inspect and monitor the  
10843 closed-vent system as follows:  
10844  
10845 i) Closed-vent system joints, seams, or other connections that  
10846 are permanently or semi-permanently sealed (e.g., a welded  
10847 joint between two sections of hard piping or a bolted and  
10848 gasketed ducting flange) must be visually inspected at least  
10849 once per year to check for defects that could result in air  
10850 pollutant emissions. The owner or operator must monitor a  
10851 component or connection using the procedures specified in  
10852 Section 724.934(b) to demonstrate that it operates with no  
10853 detectable emissions following any time the component is  
10854 repaired or replaced (e.g., a section of damaged hard piping  
10855 is replaced with new hard piping) or the connection is  
10856 unsealed (e.g., a flange is unbolted).  
10857

- 10858  
10859  
10860  
10861  
10862  
10863  
10864  
10865  
10866  
10867  
10868  
10869  
10870  
10871  
10872  
10873  
10874  
10875  
10876  
10877  
10878  
10879  
10880  
10881  
10882  
10883  
10884  
10885  
10886  
10887  
10888  
10889  
10890  
10891  
10892  
10893  
10894  
10895  
10896  
10897  
10898  
10899  
10900
- ii) Closed-vent system components or connections other than those specified in subsection (l)(1)(B)(i) must be monitored annually and at other times as requested by the Regional Administrator, except as provided for in subsection (o), using the procedures specified in Section 724.934(b) to demonstrate that the components or connections operate with no detectable emissions.
  - C) In the event that a defect or leak is detected, the owner or operator must repair the defect or leak in accordance with the requirements of subsection (l)(3).
  - D) The owner or operator must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 724.935.
- 2) Each closed-vent system that is used to comply with subsection (k)(2) must be inspected and monitored in accordance with the following requirements:
- A) The closed-vent system must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork or piping or loose connections.
  - B) The owner or operator must perform an initial inspection of the closed-vent system on or before the date that the system becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year.
  - C) In the event that a defect or leak is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (l)(3).
  - D) The owner or operator must maintain a record of the inspection and monitoring in accordance with the requirements specified in Section 724.935.
- 3) The owner or operator must repair all detected defects as follows:
- A) Detectable emissions, as indicated by visual inspection or by an instrument reading greater than 500 ppmv above background, must be controlled as soon as practicable, but not later than 15 calendar

- 10901 days after the emission is detected, except as provided for in  
10902 subsection (1)(3)(C).  
10903  
10904 B) A first attempt at repair must be made no later than five calendar  
10905 days after the emission is detected.  
10906  
10907 C) Delay of repair of a closed-vent system for which leaks have been  
10908 detected is allowed if the repair is technically infeasible without a  
10909 process unit shutdown, or if the owner or operator determines that  
10910 emissions resulting from immediate repair would be greater than  
10911 the fugitive emissions likely to result from delay of repair. Repair  
10912 of such equipment must be completed by the end of the next  
10913 process unit shutdown.  
10914  
10915 D) The owner or operator must maintain a record of the defect repair  
10916 in accordance with the requirements specified in Section 724.935.  
10917  
10918 m) A closed-vent system or control device used to comply with provisions of this  
10919 Subpart AA must be operated at all times when emissions may be vented to it.  
10920  
10921 n) The owner or operator using a carbon adsorption system to control air pollutant  
10922 emissions must document that all carbon removed that is a hazardous waste and  
10923 that is removed from the control device is managed in one of the following  
10924 manners, regardless of the volatile organic concentration of the carbon:  
10925  
10926 1) It is regenerated or reactivated in a thermal treatment unit that meets one  
10927 of the following:  
10928  
10929 A) The owner or operator of the unit has been issued a final permit  
10930 under 35 Ill. Adm. Code 702, 703, and 705 that implements the  
10931 requirements of Subpart X ~~of this Part~~; or  
10932  
10933 B) The unit is equipped with and operating air emission controls in  
10934 accordance with the applicable requirements of Subparts AA and  
10935 CC ~~of this Part~~ or Subparts AA and CC of 35 Ill. Adm. Code 725;  
10936 or  
10937  
10938 C) The unit is equipped with and operating air emission controls in  
10939 accordance with a national emission standard for hazardous air  
10940 pollutants under 40 CFR 61 (National Emission Standards for  
10941 Hazardous Air Pollutants) or 63 (National Emission Standards for  
10942 Hazardous Air Pollutants for Source Categories), each  
10943 incorporated by reference in 35 Ill. Adm. Code 720.111(b).

- 10944  
10945  
10946  
10947  
10948  
10949  
10950  
10951  
10952  
10953  
10954  
10955  
10956  
10957  
10958  
10959  
10960  
10961  
10962  
10963  
10964  
10965  
10966  
10967  
10968  
10969  
10970  
10971  
10972  
10973  
10974  
10975  
10976  
10977  
10978  
10979  
10980
- 2) It is incinerated in a hazardous waste incinerator for which the owner or operator has done either of the following:
    - A) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart O of this Part; or
    - B) The owner or operator has certified compliance in accordance with the interim status requirements of Subpart O of 35 Ill. Adm. Code 725.
  - 3) It is burned in a boiler or industrial furnace for which the owner or operator has done either of the following:
    - A) The owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 that implements the requirements of Subpart H of 35 Ill. Adm. Code 726; or
    - B) The owner or operator has designed and operates the boiler or industrial furnace in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726.
- o) Any components of a closed-vent system that are designated, as described in Section 724.935(c)(9), as unsafe to monitor are exempt from the requirements of subsection (l)(1)(B)(ii) if both of the following conditions are fulfilled:
- 1) The owner or operator of the closed-vent system has determined that the components of the closed-vent system are unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with subsection (l)(1)(B)(ii); and
  - 2) The owner or operator of the closed-vent system adheres to a written plan that requires monitoring the closed-vent system components using the procedure specified in subsection (l)(1)(B)(ii) as frequently as practicable during safe-to-monitor times.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.934 Test Methods and Procedures**

- 10981  
10982  
10983  
10984  
10985  
10986
- a) Each owner or operator subject to the provisions of this Subpart AA must comply with the test methods and procedures requirements provided in this Section.

10987  
10988  
10989  
10990  
10991  
10992  
10993  
10994  
10995  
10996  
10997  
10998  
10999  
11000  
11001  
11002  
11003  
11004  
11005  
11006  
11007  
11008  
11009  
11010  
11011  
11012  
11013  
11014  
11015  
11016  
11017  
11018  
11019  
11020  
11021  
11022  
11023  
11024  
11025  
11026  
11027  
11028  
11029

b) When a closed-vent system is tested for compliance with no detectable emissions, as required in Section 724.933(1), the test must comply with the following requirements:

- 1) Monitoring must comply with Reference Method 21 (Determination of Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
- 2) The detection instrument must meet the performance criteria of Reference Method 21.
- 3) The instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.
- 4) Calibration gases must be as follows:
  - A) Zero air (less than 10 ppm of hydrocarbon in air); and
  - B) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
- 5) The background level must be determined as set forth in Reference Method 21.
- 6) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
- 7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

c) Performance tests to determine compliance with Section 724.932(a) and with the total organic compound concentration limit of Section 724.933(c) must comply with the following:

- 1) Performance tests to determine total organic compound concentrations and mass flow rates entering and exiting control devices must be conducted and data reduced in accordance with the following reference methods and calculation procedures:
  - A) Reference Method 2 (Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)) in appendix A to 40

- 11030 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm.  
 11031 Code 720.111(b), for velocity and volumetric flow rate.  
 11032  
 11033 B) Reference Method 18 (Measurement of Gaseous Organic  
 11034 Compound Emissions by Gas Chromatography) or Reference  
 11035 Method 25A (Determination of Total Gaseous Organic  
 11036 Concentration Using a Flame Ionization Analyzer) in appendix A  
 11037 to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill.  
 11038 Adm. Code 720.111(b), for organic content. If Reference Method  
 11039 25A is used, the organic HAP used as the calibration gas must be  
 11040 the single organic HAP representing the largest percent by volume  
 11041 of the emissions. The use of Reference Method 25A is acceptable  
 11042 if the response from the high-level calibration gas is at least 20  
 11043 times the standard deviation of the response from the zero  
 11044 calibration gas when the instrument is zeroed on the most sensitive  
 11045 scale.  
 11046  
 11047 C) Each performance test must consist of three separate runs, each run  
 11048 conducted for at least one hour under the conditions that exist  
 11049 when the hazardous waste management unit is operating at the  
 11050 highest load or capacity level reasonably expected to occur. For  
 11051 the purpose of determining total organic compound concentrations  
 11052 and mass flow rates, the average of results of all runs applies. The  
 11053 average must be computed on a time-weighted~~time-weighted~~ basis.  
 11054  
 11055 D) Total organic mass flow rates must be determined by the following  
 11056 equation:  
 11057  
 11058 i) For a source using Reference Method 18:  
 11059

$$E_h = Q_{2sd} + \left( \sum_{i=1}^n C_i \times MW_i \right) \times 0.0416 \times 10^{-6}$$

11060  
 11061  
 11062

Where:

- $E_h$  = The total organic mass flow rate, kg/h;  
 $Q_{2sd}$  = The volumetric flow rate of gases entering  
 or exiting control device, dscm/h, as  
 determined by Reference Method 2;  
 $N$  = The number of organic compounds in the  
 vent gas;  
 $C_i$  = The organic concentration in ppm, dry basis,  
 of compound i in the vent gas, as determined

- by Reference Method 18;
- MW<sub>i</sub> = The molecular weight of organic compound i in the vent gas, kg/kg-mol;
- 0.0416 = The conversion factor for molar volume, kg-mol/m<sup>3</sup>, at 293 K and 760 mm Hg; and
- 10<sup>-6</sup> = The conversion factor from ppm.

11063  
11064  
11065  
11066  
11067  
11068  
11069

ii) For a source using Reference Method 25A:

$$E_h = Q \times C \times MW \times 0.0416 \times 10^{-6}$$

Where:

- E<sub>h</sub> = The total organic mass flow rate, kg/h;
- Q = The volumetric flow rate of gases entering or exiting control device, dscm/h, as determined by Reference Method 2;
- C = The organic concentration in ppm, dry basis, of compound i in the vent gas, as determined by Reference Method 25A;
- MW = The molecular weight of propane, 44 kg/kg-mol;
- 0.0416 = The conversion factor for molar volume, kg-mol/m<sup>3</sup>, at 293 K and 760 mm Hg; and
- 10<sup>-6</sup> = The conversion factor from ppm.

11070  
11071  
11072  
11073  
11074  
11075  
11076  
11077

E) The annual total organic emission rate must be determined by the following equation:

$$A = F \times H$$

Where:

- A = total organic emission rate, kg/y;
- F = the total organic mass flow rate, kg/h, as calculated in subsection (c)(1)(D); and
- H = the total annual hours of operation for the affected unit, H per Y.

11078  
11079  
11080  
11081  
11082

F) Total organic emissions from all affected process vents at the facility must be determined by summing the hourly total organic mass emissions rates (F as determined in subsection (c)(1)(D)) and by summing the annual total organic mass emission rates (A as

- 11083 determined in subsection (c)(1)(E)) for all affected process vents at  
11084 the facility.  
11085
- 11086 2) The owner or operator must record such process information as is  
11087 necessary to determine the conditions of the performance tests.  
11088 Operations during periods of startup, shutdown, and malfunction do not  
11089 constitute representative conditions for the purpose of a performance test.  
11090
- 11091 3) The owner or operator of an affected facility must provide, or cause to be  
11092 provided, performance testing facilities as follows:  
11093
- 11094 A) Sampling ports adequate for the test methods specified in  
11095 subsection (c)(1).  
11096
- 11097 B) Safe sampling platforms.  
11098
- 11099 C) Safe access to sampling platforms.  
11100
- 11101 D) Utilities for sampling and testing equipment.  
11102
- 11103 4) For the purpose of making compliance determinations, the time-weighted  
11104 average of the results of the three runs must apply. In the event that a  
11105 sample is accidentally lost or conditions occur in which one of the three  
11106 runs must be discontinued because of forced shutdown, failure of an  
11107 irreplaceable portion of the sample train, extreme meteorological  
11108 conditions, or other circumstances beyond the owner or operator's control,  
11109 compliance may, upon the Agency's approval, be determined using the  
11110 average of the results of the two other runs.  
11111
- 11112 d) To show that a process vent associated with a hazardous waste distillation,  
11113 fractionation, thin-film evaporation, solvent extraction, or air or steam stripping  
11114 operation is not subject to the requirements of this Subpart AA, the owner or  
11115 operator must make an initial determination that the time-weighted, annual  
11116 average total organic concentration of the waste managed by the waste  
11117 management unit is less than 10 ppmw using one of the following two methods:  
11118
- 11119 1) Direct measurement of the organic concentration of the waste using the  
11120 following procedures:  
11121
- 11122 A) The owner or operator must take a minimum of four grab samples  
11123 of waste for each wastestream managed in the affected unit under  
11124 process conditions expected to cause the maximum waste organic  
11125 concentration.

- 11126  
11127  
11128  
11129  
11130  
11131  
11132  
11133  
11134  
11135  
11136  
11137  
11138  
11139  
11140  
11141  
11142  
11143  
11144  
11145  
11146  
11147  
11148  
11149  
11150  
11151  
11152  
11153  
11154  
11155  
11156  
11157  
11158  
11159  
11160  
11161  
11162  
11163  
11164  
11165  
11166  
11167  
11168
- B) For waste generated onsite, the grab samples must be collected at a point before the waste is exposed to the atmosphere, such as in an enclosed pipe or other closed system that is used to transfer the waste after generation to the first affected distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation. For waste generated offsite, the grab samples must be collected at the inlet to the first waste management unit that receives the waste provided the waste has been transferred to the facility in a closed system such as a tank truck and the waste is not diluted or mixed with other waste.
  - C) Each sample must be analyzed and the total organic concentration of the sample must be computed using Method 9060A (Total Organic Carbon) of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," USEPA publication number EPA-530/SW-846, incorporated by reference under 35 Ill. Adm. Code 720.111(a), or analyzed for its individual constituents.
  - D) The arithmetic mean of the results of the analyses of the four samples apply for each wastestream managed in the unit in determining the time-weighted, annual average total organic concentration of the waste. The time-weighted average is to be calculated using the annual quantity of each wastestream processed and the mean organic concentration of each wastestream managed in the unit.
- 2) Using knowledge of the waste to determine that its total organic concentration is less than 10 ppmw. Documentation of the waste determination is required. Examples of documentation that must be used to support a determination under this subsection (d)(2) include the following:
- A) Production process information documenting that no organic compounds are used;
  - B) Information that the waste is generated by a process that is identical to a process at the same or another facility that has previously been demonstrated by direct measurement to generate a wastestream having a total organic content less than 10 ppmw; or
  - C) Prior speciation analysis results on the same wastestream where it is also documented that no process changes have occurred since

that analysis that could affect the waste total organic concentration.

- e) The determination that a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation that manages hazardous wastes that have time-weighted, annual average total organic concentrations less than 10 ppmw must be made as follows:
  - 1) By the effective date that the facility becomes subject to the provisions of this Subpart AA or by the date when the waste is first managed in a waste management unit, whichever is later; and either of the following:
  - 2) For continuously generated waste, annually; or
  - 3) Whenever there is a change in the waste being managed or a change in the process that generates or treats the waste.
- f) When an owner or operator and the Agency do not agree on whether a distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation manages a hazardous waste with organic concentrations of at least 10 ppmw based on knowledge of the waste, direct measurement may be used to resolve the dispute, as specified in subsection (d)(1).

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.935 Recordkeeping Requirements**

- a) Compliance Required.
  - 1) Each owner or operator subject to the provisions of this Subpart AA must comply with the recordkeeping requirements of this Section.
  - 2) An owner or operator of more than one hazardous waste management unit subject to the provisions of this Subpart AA may comply with the recordkeeping requirements for these hazardous waste management units in one recordkeeping system if the system identifies each record by each hazardous waste management unit.
- b) Owners and operators must record the following information in the facility operating record:
  - 1) For facilities that comply with the provisions of Section 724.933(a)(2), an implementation schedule that includes dates by which the closed-vent system and control device will be installed and in operation. The schedule

11212 must also include a rationale of why the installation cannot be completed  
11213 at an earlier date. The implementation schedule must be in the facility  
11214 operating record by the effective date that the facility becomes subject to  
11215 the provisions of this Subpart AA.  
11216

11217 2) Up-to-date documentation of compliance with the process vent standards  
11218 in Section 724.932, including the following:  
11219

11220 A) Information and data identifying all affected process vents, annual  
11221 throughput, and operating hours of each affected unit, estimated  
11222 emission rates for each affected vent and for the overall facility  
11223 (i.e., the total emissions for all affected vents at the facility), and  
11224 the approximate location within the facility of each affected unit  
11225 (e.g., identify the hazardous waste management units on a facility  
11226 plot plan).  
11227

11228 B) Information and data supporting determination of vent emissions  
11229 and emission reductions achieved by add-on control devices based  
11230 on engineering calculations or source tests. For the purpose of  
11231 determining compliance, determinations of vent emissions and  
11232 emission reductions must be made using operating parameter  
11233 values (e.g., temperatures, flow rates, or vent stream organic  
11234 compounds and concentrations) that represent the conditions that  
11235 result in maximum organic emissions, such as when the waste  
11236 management unit is operating at the highest load or capacity level  
11237 reasonably expected to occur. If the owner or operator takes any  
11238 action (e.g., managing a waste of different composition or  
11239 increasing operating hours of affected waste management units)  
11240 that would result in an increase in total organic emissions from  
11241 affected process vents at the facility, then a new determination is  
11242 required.  
11243

11244 3) Where an owner or operator chooses to use test data to determine the  
11245 organic removal efficiency or total organic compound concentration  
11246 achieved by the control device, a performance test plan. The test plan  
11247 must include the following:  
11248

11249 A) A description of how it is determined that the planned test is going  
11250 to be conducted when the hazardous waste management unit is  
11251 operating at the highest load or capacity level reasonably expected  
11252 to occur. This must include the estimated or design flow rate and  
11253 organic content of each vent stream and define the acceptable  
11254 operating ranges of key process and control device parameters

- 11255 during the test program.  
11256  
11257 B) A detailed engineering description of the closed-vent system and  
11258 control device including the following:  
11259  
11260 i) Manufacturer's name and model number of control device;  
11261  
11262 ii) Type of control device;  
11263  
11264 iii) Dimensions of the control device;  
11265  
11266 iv) Capacity;and  
11267  
11268 v) Construction materials.  
11269  
11270 C) A detailed description of sampling and monitoring procedures,  
11271 including sampling and monitoring locations in the system, the  
11272 equipment to be used, sampling and monitoring frequency, and  
11273 planned analytical procedures for sample analysis.  
11274  
11275 4) Documentation of compliance with Section 724.933 must include the  
11276 following information:  
11277  
11278 A) A list of all information references and sources used in preparing  
11279 the documentation.  
11280  
11281 B) Records, including the dates of each compliance test required by  
11282 Section 724.933(k).  
11283  
11284 C) If engineering calculations are used, a design analysis,  
11285 specifications, drawings, schematics, and piping and  
11286 instrumentation diagrams based on the appropriate sections of  
11287 "APTI Course 415: Control of Gaseous Emissions," USEPA  
11288 publication number EPA-450/2-81-005, incorporated by reference  
11289 in 35 Ill. Adm. Code 720.111(a), or other engineering texts,  
11290 approved by the Agency, that present basic control device design  
11291 information. Documentation provided by the control device  
11292 manufacturer or vendor that describes the control device design in  
11293 accordance with subsections (b)(4)(C)(i) through (b)(4)(C)(vii)  
11294 may be used to comply with this requirement. The design analysis  
11295 must address the vent stream characteristics and control device  
11296 operation parameters as specified below.  
11297

- 11298  
11299  
11300  
11301  
11302  
11303  
11304  
11305  
11306  
11307  
11308  
11309  
11310  
11311  
11312  
11313  
11314  
11315  
11316  
11317  
11318  
11319  
11320  
11321  
11322  
11323  
11324  
11325  
11326  
11327  
11328  
11329  
11330  
11331  
11332  
11333  
11334  
11335  
11336  
11337  
11338  
11339  
11340
- i) For a thermal vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.
  - ii) For a catalytic vapor incinerator, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average temperatures across the catalyst bed inlet and outlet.
  - iii) For a boiler or process heater, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also establish the design minimum and average flame zone temperatures, combustion zone residence time and description of method and location where the vent stream is introduced into the combustion zone.
  - iv) For a flare, the design analysis must consider the vent stream composition, constituent concentrations, and flow rate. The design analysis must also consider the requirements specified in Section 724.933(d).
  - v) For a condenser, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream and design average temperatures of the coolant fluid at the condenser inlet and outlet.
  - vi) For a carbon adsorption system, such as a fixed-bed adsorber that regenerates the carbon bed directly onsite in the control device, the design analysis must consider the vent stream composition, constituent concentrations, flow rate, relative humidity and temperature. The design analysis must also establish the design exhaust vent stream organic compound concentration level, number and capacity of carbon beds, type and working capacity of

- 11341 activated carbon used for carbon beds, design total steam  
11342 flow over the period of each complete carbon bed  
11343 regeneration cycle, duration of the carbon bed steaming and  
11344 cooling/drying cycles, design carbon bed temperature after  
11345 regeneration, design carbon bed regeneration time and  
11346 design service life of carbon.  
11347
- 11348 vii) For a carbon adsorption system, such as a carbon canister  
11349 that does not regenerate the carbon bed directly onsite in  
11350 the control device, the design analysis must consider the  
11351 vent stream composition, constituent concentrations, flow  
11352 rate, relative humidity and temperature. The design  
11353 analysis must also establish the design outlet organic  
11354 concentration level, capacity of carbon bed, type and  
11355 working capacity of activated carbon used for carbon bed  
11356 and design carbon replacement interval based on the total  
11357 carbon working capacity of the control device and source  
11358 operating schedule.  
11359
- 11360 D) A statement signed and dated by the owner or operator certifying  
11361 that the operating parameters used in the design analysis  
11362 reasonably represent the conditions that exist when the hazardous  
11363 waste management unit is or would be operating at the highest load  
11364 or capacity level reasonably expected to occur.  
11365
- 11366 E) A statement signed and dated by the owner or operator certifying  
11367 that the control device is designed to operate at an efficiency of 95  
11368 percent or greater unless the total organic concentration limit of  
11369 Section 724.932(a) is achieved at an efficiency less than 95 weight  
11370 percent or the total organic emission limits of Section 724.932(a)  
11371 for affected process vents at the facility are attained by a control  
11372 device involving vapor recovery at an efficiency less than 95  
11373 weight percent. A statement provided by the control device  
11374 manufacturer or vendor certifying that the control equipment meets  
11375 the design specifications may be used to comply with this  
11376 requirement.  
11377
- 11378 F) If performance tests are used to demonstrate compliance, all test  
11379 results.  
11380
- 11381 c) Design documentation and monitoring operating and inspection information for  
11382 each closed-vent system and control device required to comply with the  
11383 provisions of this Part must be recorded and kept up-to-date in the facility

operating record. The information must include the following:

- 1) Description and date of each modification that is made to the closed-vent system or control device design.
- 2) Identification of operating parameter, description of monitoring device, and diagram of monitoring sensor location or locations used to comply with Section 724.933(f)(1) and (f)(2).
- 3) Monitoring, operating and inspection information required by Section 724.933(f) through (k).
- 4) Date, time, and duration of each period that occurs while the control device is operating when any monitored parameter exceeds the value established in the control device design analysis as specified below:
  - A) For a thermal vapor incinerator designed to operate with a minimum residence time of 0.50 second at a minimum temperature of 760° C, any period when the combustion temperature is below 760° C.
  - B) For a thermal vapor incinerator designed to operate with an organic emission reduction efficiency of 95 weight percent or greater, any period when the combustion zone temperature is more than 28° C below the design average combustion zone temperature established as a requirement of subsection (b)(4)(C)(i).
  - C) For a catalytic vapor incinerator, any period when:
    - i) Temperature of the vent stream at the catalyst bed inlet is more than 28° C below the average temperature of the inlet vent stream established as a requirement of subsection (b)(4)(C)(ii); or
    - ii) Temperature difference across the catalyst bed is less than 80% of the design average temperature difference established as a requirement of subsection (b)(4)(C)(ii).
  - D) For a boiler or process heater, any period when either of the following occurs:
    - i) Flame zone temperature is more than 28° C below the design average flame zone temperature established as a

11384  
11385  
11386  
11387  
11388  
11389  
11390  
11391  
11392  
11393  
11394  
11395  
11396  
11397  
11398  
11399  
11400  
11401  
11402  
11403  
11404  
11405  
11406  
11407  
11408  
11409  
11410  
11411  
11412  
11413  
11414  
11415  
11416  
11417  
11418  
11419  
11420  
11421  
11422  
11423  
11424  
11425  
11426

- 11427 requirement of subsection (b)(4)(C)(iii); or  
 11428  
 11429 ii) Position changes where the vent stream is introduced to the  
 11430 combustion zone from the location established as a  
 11431 requirement of subsection (b)(4)(C)(iii).  
 11432  
 11433 E) For a flare, period when the pilot flame is not ignited.  
 11434  
 11435 F) For a condenser that complies with Section 724.933(f)(2)(F)(i),  
 11436 any period when the organic compound concentration level or  
 11437 readings of organic compounds in the exhaust vent stream from the  
 11438 condenser are more than 20 percent greater than the design outlet  
 11439 organic compound concentration level established as a requirement  
 11440 of subsection (b)(4)(C)(v).  
 11441  
 11442 G) For a condenser that complies with Section 724.933(f)(2)(F)(ii),  
 11443 any period when the following occurs:  
 11444  
 11445 i) Temperature of the exhaust vent stream from the condenser  
 11446 is more than 6° C above the design average exhaust vent  
 11447 stream temperature established as a requirement of  
 11448 subsection (b)(4)(C)(v).  
 11449  
 11450 ii) Temperature of the coolant fluid exiting the condenser is  
 11451 more than 6° C above the design average coolant fluid  
 11452 temperature at the condenser outlet established as a  
 11453 requirement of subsection (b)(4)(C)(v).  
 11454  
 11455 H) For a carbon adsorption system such as a fixed-bed carbon  
 11456 adsorber that regenerates the carbon bed directly onsite in the  
 11457 control device and complies with Section 724.933(f)(2)(G)(i), any  
 11458 period when the organic compound concentration level or readings  
 11459 of organic compounds in the exhaust vent stream from the carbon  
 11460 bed are more than 20 percent greater than the design exhaust vent  
 11461 stream organic compound concentration level established as a  
 11462 requirement of subsection (b)(4)(C)(vi).  
 11463  
 11464 I) For a carbon adsorption system such as a fixed-bed carbon  
 11465 adsorber that regenerates the carbon bed directly onsite in the  
 11466 control device and complies with Section 724.933(f)(2)(G)(ii), any  
 11467 period when the vent stream continues to flow through the control  
 11468 device beyond the predetermined carbon bed regeneration time  
 11469 established as a requirement of subsection (b)(4)(C)(vi).

- 11470  
11471  
11472  
11473  
11474  
11475  
11476  
11477  
11478  
11479  
11480  
11481  
11482  
11483  
11484  
11485  
11486  
11487  
11488  
11489  
11490  
11491  
11492  
11493  
11494  
11495  
11496  
11497  
11498  
11499  
11500  
11501  
11502  
11503  
11504  
11505  
11506  
11507  
11508  
11509  
11510  
11511  
11512
- 5) Explanation for each period recorded under subsection (c)(4) of the cause for control device operating parameter exceeding the design value and the measures implemented to correct the control device operation.
  - 6) For a carbon adsorption system operated subject to requirements specified in Section 724.933(g) or (h)(2), any date when existing carbon in the control device is replaced with fresh carbon.
  - 7) For a carbon adsorption system operated subject to requirements specified in Section 724.933(h)(1), a log that records the following:
    - A) Date and time when control device is monitored for carbon breakthrough and the monitoring device reading; and
    - B) Date when existing carbon in the control device is replaced with fresh carbon.
  - 8) Date of each control device startup and shutdown.
  - 9) An owner or operator designating any components of a closed-vent system as unsafe to monitor pursuant to Section 724.933(o) must record in a log that is kept in the facility operating record the identification of closed-vent system components that are designated as unsafe to monitor in accordance with the requirements of Section 724.933(o), an explanation for each closed-vent system component stating why the closed-vent system component is unsafe to monitor, and the plan for monitoring each closed-vent system component.
  - 10) When each leak is detected, as specified in Section 724.933(l), the following information must be recorded:
    - A) The instrument identification number; the closed-vent system component identification number; and the operator name, initials, or identification number.
    - B) The date the leak was detected and the date of first attempt to repair the leak.
    - C) The date of successful repair of the leak.
    - D) Maximum instrument reading measured by Reference Method 21 (Determination of Volatile Organic Compound Leaks) of appendix

11513 A to 40 CFR 60 (Test Methods), incorporated by reference in 35  
11514 Ill. Adm. Code 720.111(b), after it is successfully repaired or  
11515 determined to be nonrepairable.

- 11516  
11517 E) "Repair delayed" and the reason for the delay if a leak is not  
11518 repaired within 15 calendar days after discovery of the leak.
- 11519  
11520 i) The owner or operator may develop a written procedure  
11521 that identifies the conditions that justify a delay of repair.  
11522 In such cases, reasons for delay of repair may be  
11523 documented by citing the relevant sections of the written  
11524 procedure.
- 11525  
11526 ii) If delay of repair was caused by depletion of stocked parts,  
11527 there must be documentation that the spare parts were  
11528 sufficiently stocked on-site before depletion and the reason  
11529 for depletion.
- 11530  
11531 d) Records of the monitoring, operating, and inspection information required by  
11532 subsections (c)(3) through (c)(10) must be kept at least three years following the  
11533 date of each occurrence, measurement, corrective action, or record.
- 11534  
11535 e) For a control device other than a thermal vapor incinerator, catalytic vapor  
11536 incinerator, flare, boiler, process heater, condenser, or carbon adsorption system,  
11537 the Agency must specify the appropriate recordkeeping requirements.
- 11538  
11539 f) Up-to-date information and data used to determine whether or not a process vent  
11540 is subject to the requirements in Section 724.932, including supporting  
11541 documentation as required by Section 724.934(d)(2), when application of the  
11542 knowledge of the nature of the hazardous wastestream or the process by which it  
11543 was produced is used, must be recorded in a log that is kept in the facility  
11544 operating record.

11545  
11546 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11547  
11548 SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

11549  
11550 **Section 724.950 Applicability**

- 11551  
11552 a) The regulations in this Subpart BB apply to owners and operators of facilities that  
11553 treat, store, or dispose of hazardous wastes (except as provided in Section  
11554 724.101).
- 11555

- 11556           b)    Except as provided in Section 724.964(k), this Subpart BB applies to equipment  
 11557           that contains or contacts hazardous wastes with organic concentrations of at least  
 11558           10 percent by weight that are managed in one of the following:  
 11559
- 11560           1)    A unit that is subject to the RCRA permitting requirements of 35 Ill. Adm.  
 11561           Code 702, 703, and 705;~~;~~
  - 11562
  - 11563           2)    A unit (including a hazardous waste recycling unit) that is not exempt  
 11564           from permitting under the provisions of 35 Ill. Adm. Code  
 11565           722.117722.134(a) (i.e., a hazardous waste recycling unit that is not a "90-  
 11566           day" tank or container) and that is located at a hazardous waste  
 11567           management facility otherwise subject to the permitting requirements of  
 11568           35 Ill. Adm. Code 702, 703, and 705;~~;~~ or
  - 11569
  - 11570           3)    A unit that is exempt from permitting under the provisions of 35 Ill. Adm.  
 11571           Code ~~722.117722.134(a)~~ (i.e., a "90-day" tank or container) and which is  
 11572           not a recycling unit under the provisions of 35 Ill. Adm. Code 721.106.  
 11573
- 11574           c)    For the owner or operator of a facility subject to this Subpart BB that received a  
 11575           final permit under ~~35 Ill. Adm. Code 702, 703, and 705~~ prior to December 6,  
 11576           1996, the requirements of this Subpart BB must be incorporated into the permit  
 11577           when the permit is reissued, renewed, or modified in accordance with the  
 11578           requirements of ~~35 Ill. Adm. Code 703 and 705~~. Until such date when the owner  
 11579           or operator receives a final permit incorporating the requirements of this Subpart  
 11580           BB, the owner or operator is subject to the requirements of Subpart BB of 35 Ill.  
 11581           Adm. Code 725.  
 11582
- 11583           d)    Each piece of equipment to which this Subpart BB applies must be marked in  
 11584           such a manner that it can be distinguished readily from other pieces of equipment.  
 11585
- 11586           e)    Equipment that is in vacuum service is excluded from the requirements of  
 11587           Sections 724.952 to 724.960, if it is identified as required in Section  
 11588           724.964(g)(5).  
 11589
- 11590           f)    Equipment that contains or contacts hazardous waste with an organic  
 11591           concentration of at least 10 percent by weight for less than 300 hours per calendar  
 11592           year is excluded from the requirements of Sections 724.952 through 724.960 if it  
 11593           is identified as required in Section 724.964(g)(6).  
 11594
- 11595           g)    This subsection (g) corresponds with 40 CFR 264.1050(g), which relates  
 11596           exclusively to a facility outside Illinois. This statement maintains structural  
 11597           consistency with the corresponding federal regulations.  
 11598

- 11599 h) Purged coatings and solvents from surface coating operations subject to the
- 11600 federal national emission standards for hazardous air pollutants (NESHAPs) for
- 11601 the surface coating of automobiles and light-duty trucks at subpart IIII of 40 CFR
- 11602 63 (National Emission Standards for Hazardous Air Pollutants: Surface Coating
- 11603 of Automobiles and Light-Duty Trucks) are not subject to the requirements of this
- 11604 Subpart BB.

11605  
 11606 BOARD NOTE: The requirements of Sections 724.952 through 724.965 apply to  
 11607 equipment associated with hazardous waste recycling units previously exempt under 35  
 11608 Ill. Adm. Code 721.106(c)(1). Other exemptions under 35 Ill. Adm. Code 721.104 and  
 11609 724.101(g) are not affected by these requirements.

11610  
 11611 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 11612

11613 **Section 724.951 Definitions**  
 11614

11615 As used in this Subpart BB, all terms have the meaning given them in Section 724.931, section  
 11616 1004 of the Resource Conservation and Recovery Act, incorporated by reference in 35 Ill. Adm.  
 11617 Code 720.111, and 35 Ill. Adm. Code 720 through 728, and 738.  
 11618

11619 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 11620

11621 **Section 724.952 Standards: Pumps in Light Liquid Service**  
 11622

- 11623 a) Monitoring.
- 11624
  - 11625 1) Each pump in light liquid service must be monitored monthly to detect
  - 11626 leaks by the methods specified in Section 724.963(b), except as provided
  - 11627 in subsections (d), (e), and (f).
  - 11628
  - 11629 2) Each pump in light liquid service must be checked by visual inspection
  - 11630 each calendar week for indications of liquids dripping from the pump seal.
  - 11631
- 11632 b) Leaks.
- 11633
  - 11634 1) If an instrument reading of 10,000 ppm or greater is measured, a leak is
  - 11635 detected.
  - 11636
  - 11637 2) If there are indications of liquids dripping from the pump seal, a leak is
  - 11638 detected.
  - 11639
- 11640 c) Repairs.  
 11641

- 11642 1) When a leak is detected, it must be repaired as soon as practicable, but not  
11643 later than 15 calendar days after it is detected, except as provided in  
11644 Section 724.959.  
11645
- 11646 2) A first attempt at repair (e.g., tightening the packing gland) must be made  
11647 no later than five calendar days after each leak is detected.  
11648
- 11649 d) Each pump equipped with a dual mechanical seal system that includes a barrier  
11650 fluid system is exempt from the requirements of subsection (a) of this Section,  
11651 provided the following requirements are met:  
11652
  - 11653 1) Each dual mechanical seal system must be as follows:  
11654
    - 11655 A) Operated with the barrier fluid at a pressure that is at all times  
11656 greater than the pump stuffing box pressures;  
11657
    - 11658 B) Equipped with a barrier fluid degassing reservoir that is connected  
11659 by a closed-vent system to a control device that complies with the  
11660 requirements of Section 724.960; or  
11661
    - 11662 C) Equipped with a system that purges the barrier fluid into a  
11663 hazardous wastestream with no detectable emissions to the  
11664 atmosphere.  
11665
  - 11666 2) The barrier fluid system must not be a hazardous waste with organic  
11667 concentrations 10 percent or greater by weight.  
11668
  - 11669 3) Each barrier fluid system must be equipped with a sensor that will detect  
11670 failure of the seal system, the barrier fluid system, or both.  
11671
  - 11672 4) Each pump must be checked by visual inspection, each calendar week, for  
11673 indications of liquids dripping from the pump seals.  
11674
  - 11675 5) Alarms.  
11676
    - 11677 A) Each sensor as described in subsection (d)(3) ~~of this Section~~ must  
11678 be checked daily or be equipped with an audible alarm that must be  
11679 checked monthly to ensure that it is functioning properly.  
11680
    - 11681 B) The owner or operator must determine, based on design  
11682 considerations and operating experience, a criterion that indicates  
11683 failure of the seal system, the barrier fluid system, or both.  
11684

- 11685 6) Leaks.
- 11686
- 11687 A) If there are indications of liquids dripping from the pump seal or
- 11688 the sensor indicates failure of the seal system, the barrier fluid
- 11689 system, or both based on the criterion determined in subsection
- 11690 (d)(5)(B) of this Section, a leak is detected.
- 11691
- 11692 B) When a leak is detected, it must be repaired as soon as practicable,
- 11693 but not later than 15 calendar days after it is detected, except as
- 11694 provided in Section 724.959.
- 11695
- 11696 C) A first attempt at repair (e.g., relapping the seal) must be made no
- 11697 later than five calendar days after each leak is detected.
- 11698
- 11699 e) Any pump that is designated, as described in Section 724.964(g)(2), for no
- 11700 detectable emissions, as indicated by an instrument reading of less than 500 ppm
- 11701 above background, is exempt from the requirements of subsections (a), (c), and
- 11702 (d) of this Section, if the pump meets the following requirements:
- 11703
- 11704 1) It must have no externally actuated shaft penetrating the pump housing.
- 11705
- 11706 2) It must operate with no detectable emissions as indicated by an instrument
- 11707 reading of less than 500 ppm above background, as measured by the
- 11708 methods specified in Section 724.963(c).
- 11709
- 11710 3) It must be tested for compliance with subsection (e)(2) of this Section
- 11711 initially upon designation, annually and at other times, as specified in the
- 11712 RCRA permit.
- 11713
- 11714 f) If any pump is equipped with a closed-vent system capable of capturing and
- 11715 transporting any leakage from the seal or seals to a control device that complies
- 11716 with the requirements of Section 724.960, it is exempt from the requirements of
- 11717 subsections (a) through (e) of this Section.
- 11718

11719 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11720

11721 **Section 724.953 Standards: Compressors**

11722

- 11723 a) Each compressor must be equipped with a seal system that includes a barrier fluid
- 11724 system and that prevents leakage of total organic emissions to the atmosphere,
- 11725 except as provided in subsections (h) and (i) of this Section.
- 11726
- 11727 b) Each compressor seal system as required in subsection (a) of this Section must be

as follows:

- 1) Operated with the barrier fluid at a pressure that is at all times greater than the compressor stuffing box pressure; or
- 2) Equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with the requirements of Section 724.960; or
- 3) Equipped with a system that purges the barrier fluid into a hazardous wastestream with no detectable emissions to atmosphere.

c) The barrier fluid must not be a hazardous waste with organic concentrations 10 percent or greater by weight.

d) Each barrier fluid system as described in subsections (a) through (c) of this Section must be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

e) Failure detection.

1) Each sensor as required in subsection (d) of this Section must be checked daily or must be equipped with an audible alarm that must be checked monthly to ensure that it is functioning properly, unless the compressor is located within the boundary of an unmanned plant site, in which case the sensor must be checked daily.

2) The owner or operator must determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

f) If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under subsection (e)(2) of this Section, a leak is detected.

g) Repairs.

1) When a leak is detected, it must be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section 724.959.

2) A first attempt at repair (e.g., tightening the packing gland) must be made no later than five calendar days after each leak is detected.

- 11771
- 11772 h) A compressor is exempt from the requirements of subsections (a) and (b) of this
- 11773 Section if it is equipped with a closed-vent system capable of capturing and
- 11774 transporting any leakage from the seal to a control device that complies with the
- 11775 requirements of Section 724.960, except as provided in subsection (i) of this
- 11776 Section.
- 11777
- 11778 i) Any compressor that is designated, as described in Section 724.964(g)(2), for no
- 11779 detectable emission as indicated by an instrument reading of less than 500 ppm
- 11780 above background, is exempt from the requirements of subsections (a) through (h)
- 11781 of this Section if the following is true of the compressor:
- 11782
- 11783 1) It is determined to be operating with no detectable emissions, as indicated
- 11784 by an instrument reading of less than 500 ppm above background, as
- 11785 measured by the method specified in Section 724.963(c).
- 11786
- 11787 2) It is tested for compliance with subsection (i)(1) of this Section initially
- 11788 upon designation, annually and other times, as specified in the RCRA
- 11789 permit.
- 11790

11791 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11792

11793 **Section 724.954 Standards: Pressure Relief Devices in Gas/Vapor Service**

11794

- 11795 a) Except during pressure releases, each pressure relief device in gas-vapor service
- 11796 must be operated with no detectable emissions, as indicated by an instrument
- 11797 reading of less than 500 ppm above background, as measured by the method
- 11798 specified in Section 724.963(c).
- 11799
- 11800 b) Actions following pressure release.
- 11801
- 11802 1) After each pressure release, the pressure relief device must be returned to
- 11803 a condition of no detectable emissions, as indicated by an instrument
- 11804 reading of less than 500 ppm above background, as soon as practicable,
- 11805 but no later than five calendar days after each pressure release, except as
- 11806 provided in Section 724.959.
- 11807
- 11808 2) No later than five calendar days after the pressure release, the pressure
- 11809 relief device must be monitored to confirm the condition of no detectable
- 11810 emissions, as indicated by an instrument reading of less than 500 ppm
- 11811 above background, as measured by the method specified in Section
- 11812 724.963(c).
- 11813

- 11814 c) Any pressure relief device that is equipped with a closed-vent system capable of
- 11815 capturing and transporting leakage from the pressure relief device to a control
- 11816 device as described in Section 724.960 is exempt from the requirements of
- 11817 subsections (a) and (b) ~~of this Section.~~
- 11818

11819 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11820

11821 **Section 724.955 Standards: Sampling Connecting Systems**

11822

- 11823 a) Each sampling connection system must be equipped with a closed-purge, closed-
- 11824 loop, or closed-vent system. This system must collect the sample purge for return
- 11825 to the process or for routing to the appropriate treatment system. Gases displaced
- 11826 during filling of the sample container are not required to be collected or captured.
- 11827
- 11828 b) Each closed-purge, closed-loop, or closed-vent system as required in subsection
- 11829 (a) ~~of this Section~~, must meet one of the following requirements:
- 11830
- 11831 1) It must return the purged process fluid directly to the process line;
- 11832
- 11833 2) It must collect and recycle the purged process fluid; or
- 11834
- 11835 3) It must be designed and operated to capture and transport all the purged
- 11836 process fluid to a waste management unit that complies with the
- 11837 applicable requirements of Sections 724.984 through 724.986 or a control
- 11838 device that complies with the requirements of Section 724.960.
- 11839
- 11840 c) In-situ sampling systems and sampling systems without purges are exempt from
- 11841 the requirements of subsections (a) and (b) ~~of this Section.~~
- 11842

11843 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11844

11845 **Section 724.956 Standards: Open-Ended Valves or Lines**

11846

- 11847 a) Equipment.
- 11848
- 11849 1) Each open-ended valve or line must be equipped with a cap, blind flange,
- 11850 plug, or a second valve.
- 11851
- 11852 2) The cap, blind flange, plug, or second valve must seal the open end at all
- 11853 times except during operations requiring hazardous wastestream flow
- 11854 through the open-ended valve or line.
- 11855
- 11856 b) Each open-ended valve or line equipped with a second valve must be operated in

11857 a manner such that the valve on the hazardous wastestream end is closed before  
11858 the second valve is closed.

11859  
11860 c) When a double block and bleed system is being used, the bleed valve or line may  
11861 remain open during operations that require venting the line between the block  
11862 valves but must comply with subsection (a) of this Section at all other times.

11863  
11864 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
11865

11866 **Section 724.957 Standards: Valves in Gas/Vapor or Light Liquid Service**  
11867

11868 a) Each valve in gas-vapor or light liquid service must be monitored monthly to  
11869 detect leaks by the methods specified in Section 724.963(b) and must comply  
11870 with subsections (b) through (e) of this Section, except as provided in subsections  
11871 (f), (g), and (h) of this Section, and in Sections Section 724.961 and 724.962.

11872  
11873 b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

11874  
11875 c) Monitoring Frequency.

11876  
11877 1) Any valve for which a leak is not detected for two successive months must  
11878 be monitored the first month of every succeeding quarter, beginning with  
11879 the next quarter, until a leak is detected.

11880  
11881 2) If a leak is detected, the valve must be monitored monthly until a leak is  
11882 not detected for two successive months.

11883  
11884 d) Leak repair.

11885  
11886 1) When a leak is detected, it must be repaired as soon as practicable, but no  
11887 later than 15 calendar days after the leak is detected, except as provided in  
11888 Section 724.959.

11889  
11890 2) A first attempt at repair must be made no later than five calendar days  
11891 after each leak is detected.

11892  
11893 e) First attempts at repair include, but are not limited to the following best practices  
11894 where practicable:

11895  
11896 1) Tightening of bonnet bolts.

11897  
11898 2) Replacement of bonnet bolts.  
11899

- 11900 3) Tightening of packing gland nuts.  
 11901  
 11902 4) Injection of lubricant into lubricated packing.  
 11903  
 11904 f) Any valve that is designated, as described in Section 724.964(g)(2), for no  
 11905 detectable emissions, as indicated by an instrument reading of less than 500 ppm  
 11906 above background, is exempt from the requirements of subsection (a) of this  
 11907 Section if the following is true of the valve:  
 11908  
 11909 1) It has no external actuating mechanism in contact with the hazardous  
 11910 wastestream.  
 11911  
 11912 2) It is operated with emissions less than 500 ppm above background as  
 11913 determined by the method specified in Section 724.963(c).  
 11914  
 11915 3) It is tested for compliance with subsection (f)(2) of this Section initially  
 11916 upon designation, annually, and at other times as specified in the RCRA  
 11917 permit.  
 11918  
 11919 g) Any valve that is designated, as described in Section 724.964(h)(1), as an unsafe-  
 11920 to-monitor valve is exempt from the requirements of subsection (a) of this  
 11921 Section, if the following occurs:  
 11922  
 11923 1) The owner or operator of the valve determines that the valve is unsafe to  
 11924 monitor because monitoring personnel would be exposed to an immediate  
 11925 danger as a consequence of complying with subsection (a) of this Section.  
 11926  
 11927 2) The owner or operator of the valve adheres to a written plan that requires  
 11928 monitoring of the valve as frequently as practicable during safe-to-monitor  
 11929 times.  
 11930  
 11931 h) Any valve that is designated, as described in Section 724.964(h)(2), as a difficult-  
 11932 to-monitor valve is exempt from the requirements of subsection (a) of this  
 11933 Section, if the following occurs:  
 11934  
 11935 1) The owner or operator of the valve determines that the valve cannot be  
 11936 monitored without elevating the monitoring personnel more than two  
 11937 meters above a support surface;  
 11938  
 11939 2) The hazardous waste management unit within which the valve is located  
 11940 was in operation before June 21, 1990; and  
 11941  
 11942 3) The owner or operator of the valve follows a written plan that requires

11943 monitoring of the valve at least once per calendar year.

11944

11945 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11946

11947 **Section 724.958 Standards: Pumps, Valves, Pressure Relief Devices, and Other**

11948 **Connectors**

11949

11950 a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or  
11951 heavy liquid service and flanges and other connectors must be monitored within  
11952 five days by the method specified in Section 724.963(b), if evidence of a potential  
11953 leak is found by visual, audible, olfactory, or any other detection method.

11954

11955 b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

11956

11957 c) Repairs.

11958

11959 1) When a leak is detected, it must be repaired as soon as practicable, but not  
11960 later than 15 calendar days after it is detected, except as provided in  
11961 Section 724.959.

11962

11963 2) The first attempt at repair must be made no later than five calendar days  
11964 after each leak is detected.

11965

11966 d) First attempts at repair include, but are not limited to, the best practices described  
11967 under Section 724.957(e).

11968

11969 e) Any connector that is inaccessible or is ceramic or ceramic-lined (e.g., porcelain,  
11970 glass, or glass-lined) is exempt from the monitoring requirements of subsection  
11971 (a) of this Section and from the recordkeeping requirements of Section 724.964.

11972

11973 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

11974

11975 **Section 724.960 Standards: Closed-Vent Systems and Control Devices**

11976

11977 a) An owner or operator of a closed-vent system or control device subject to this  
11978 Subpart BB must comply with the provisions of Section 724.933.

11979

11980 b) Implementation Schedule.

11981

11982 1) The owner or operator of an existing facility that cannot install a closed-  
11983 vent system and control device to comply with the provisions of this  
11984 Subpart BB on the effective date that the facility becomes subject to the  
11985 provisions of this Subpart BB must prepare an implementation schedule

11986 that includes dates by which the closed-vent system and control device  
11987 will be installed and in operation. The controls must be installed as soon  
11988 as possible, but the implementation schedule may allow up to 30 months  
11989 after the effective date that the facility becomes subject to this Subpart BB  
11990 for installation and startup.

11991  
11992 2) Any unit that begins operation after December 21, 1990, and which is  
11993 subject to the provisions of this Subpart BB when operation begins, must  
11994 comply with the rules immediately (i.e., the unit must have control devices  
11995 installed and operating on startup of the affected unit); the 30-month  
11996 implementation schedule does not apply.

11997  
11998 3) The owner or operator of any facility in existence on the effective date of a  
11999 statutory or regulatory amendment that renders the facility subject to this  
12000 Subpart BB must comply with all requirements of this Subpart BB as soon  
12001 as practicable but no later than 30 months after the effective date of the  
12002 amendment. When control equipment required by this Subpart BB cannot  
12003 be installed and begin operation by the effective date of the amendment,  
12004 the facility owner or operator must prepare an implementation schedule  
12005 that includes the following information: specific calendar dates for award  
12006 of contracts or issuance of purchase orders for the control equipment,  
12007 initiation of on-site installation of the control equipment, completion of  
12008 the control equipment installation, and performance of any testing to  
12009 demonstrate that the installed equipment meets the applicable standards of  
12010 this Subpart BB. The owner or operator must enter the implementation  
12011 schedule in the operating record or in a permanent, readily available file  
12012 located at the facility.

12013  
12014 4) An owner or operator of a facility or unit that becomes newly subject to  
12015 the requirements of this Subpart BB due to an action other than those  
12016 described in subsection (b)(3) of this Section must comply with all  
12017 applicable requirements immediately (i.e., the facility or unit must have  
12018 control devices installed and operating on the date the facility or unit  
12019 becomes subject to this Subpart BB; the 30-month implementation  
12020 schedule does not apply).

12021  
12022 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
12023

12024 **Section 724.961 Alternative Percentage Standard for Valves**

12025  
12026 a) An owner or operator subject to the requirements of Section 724.957 may elect to  
12027 have all valves within a hazardous waste management unit comply with an  
12028 alternative standard that allows no greater than two percent of the valves to leak.

12029  
12030  
12031  
12032  
12033  
12034  
12035  
12036  
12037  
12038  
12039  
12040  
12041  
12042  
12043  
12044  
12045  
12046  
12047  
12048  
12049  
12050  
12051  
12052  
12053  
12054  
12055  
12056  
12057  
12058  
12059  
12060  
12061  
12062  
12063  
12064  
12065  
12066  
12067  
12068  
12069  
12070  
12071

- 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) 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.
  - 2) 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.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.962 Skip Period Alternative for Valves**

- 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.
- 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

12072 owner or operator may monitor for leaks once every six months) for the  
12073 valves subject to the requirements in Section 724.957.

12074  
12075 3) After five consecutive quarterly leak detection periods with the percentage  
12076 of valves leaking equal to or less than two percent, an owner or operator  
12077 may begin to skip three of the quarterly leak detection periods (i.e., the  
12078 owner or operator may monitor for leaks once every year) for the valves  
12079 subject to the requirements in Section 724.957.

12080  
12081 4) If the percentage of valves leaking is greater than 2 percent, the owner or  
12082 operator must monitor monthly in compliance with the requirements in  
12083 Section 724.957, but may again elect to use this Section after meeting the  
12084 requirements of Section 724.957(c)(1).

12085  
12086 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
12087

12088 **Section 724.963 Test Methods and Procedures**  
12089

12090 a) Each owner or operator subject to the provisions of this Subpart BB must comply  
12091 with the test methods and procedures requirements provided in this Section.

12092  
12093 b) Leak detection monitoring, as required in Sections 724.952 through 724.962, must  
12094 comply with the following requirements:

12095  
12096 1) Monitoring must comply with Reference Method 21 (Determination of  
12097 Volatile Organic Compound Leaks) in appendix A to 40 CFR 60 (Test  
12098 Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

12099  
12100 2) The detection instrument must meet the performance criteria of Reference  
12101 Method 21.

12102  
12103 3) The instrument must be calibrated before use on each day of its use by the  
12104 procedures specified in Reference Method 21.

12105  
12106 4) Calibration gases must be as follows:

12107  
12108 A) Zero air (less than 10 ppm of hydrocarbon in air); and

12109  
12110 B) A mixture of methane or n-hexane and air at a concentration of  
12111 approximately, but less than 10,000 ppm methane or n-hexane.

12112  
12113 5) The instrument probe must be traversed around all potential leak interfaces  
12114 as close to the interface as possible as described in Reference Method 21.

- 12115  
 12116  
 12117  
 12118  
 12119  
 12120  
 12121  
 12122  
 12123  
 12124  
 12125  
 12126  
 12127  
 12128  
 12129  
 12130  
 12131  
 12132  
 12133  
 12134  
 12135  
 12136  
 12137  
 12138  
 12139  
 12140  
 12141  
 12142  
 12143  
 12144  
 12145  
 12146  
 12147  
 12148  
 12149  
 12150  
 12151  
 12152  
 12153  
 12154  
 12155  
 12156  
 12157
- c) When equipment is tested for compliance with no detectable emissions, as required in Sections 724.952(e), 724.953(i), 724.954, and 724.957(f), the test must comply with the following requirements:
    - 1) The requirements of subsections (b)(1) through (b)(4) of this Section apply.
    - 2) The background level must be determined as set forth in Reference Method 21.
    - 3) The instrument probe must be traversed around all potential leak interfaces as close to the interface as possible as described in Reference Method 21.
    - 4) This arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
  
  - d) In accordance with the waste analysis plan required by Section 724.113(b), an owner or operator of a facility must determine, for each piece of equipment, whether the equipment contains or contacts a hazardous waste with organic concentration that equals or exceeds 10 percent by weight using the following:
    - 1) Methods described in ASTM Methods D 2267-88 (Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography), E 168-88 (Standard Practices for General Techniques of Infrared Quantitative Analysis), E 169-87 (Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis), or E 260-85 (Standard Practice for Packed Column Gas Chromatography), each incorporated by reference in 35 Ill. Adm. Code 720.111(a);
    - 2) Method 9060A (Total Organic Carbon) of "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), for computing total organic concentration of the sample, or analyzed for its individual constituents; or
    - 3) Application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced. Documentation of a waste determination by knowledge is required. Examples of documentation that must be used to support a determination under this provision include production process information documenting that no organic compounds are used, information that the waste is generated by a process that is

12158 identical to a process at the same or another facility that has previously  
 12159 been demonstrated by direct measurement to have a total organic content  
 12160 less than 10 percent, or prior speciation analysis results on the same  
 12161 wastestream where it is also documented that no process changes have  
 12162 occurred since that analysis that could affect the waste total organic  
 12163 concentration.  
 12164

- 12165 e) If an owner or operator determines that a piece of equipment contains or contacts  
 12166 a hazardous waste with organic concentrations at least 10 percent by weight, the  
 12167 determination can be revised only after following the procedures in subsection  
 12168 (d)(1) or (d)(2) ~~of this Section~~.
- 12169
- 12170 f) When an owner or operator and the Agency do not agree on whether a piece of  
 12171 equipment contains or contacts a hazardous waste with organic concentrations at  
 12172 least 10 percent by weight, the procedures in subsection (d)(1) or (d)(2) ~~of this~~  
 12173 ~~Section~~ must be used to resolve the dispute.  
 12174
- 12175 g) Samples used in determining the percent organic content must be representative  
 12176 of the highest total organic content hazardous waste that is expected to be  
 12177 contained in or contact the equipment.  
 12178
- 12179 h) To determine if pumps or valves are in light liquid service, the vapor pressures of  
 12180 constituents must either be obtained from standard reference texts or be  
 12181 determined by ASTM D 2879-92 (Standard Test Method for Vapor Pressure-  
 12182 Temperature Relationship and Initial Decomposition Temperature of Liquids by  
 12183 Isoteniscope), incorporated by reference in 35 Ill. Adm. Code 720.111(a).  
 12184
- 12185 i) Performance tests to determine if a control device achieves 95 weight percent  
 12186 organic emission reduction must comply with the procedures of Section  
 12187 724.934(c)(1) through (c)(4).  
 12188

12189 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 12190

12191 **Section 724.964 Recordkeeping Requirements**  
 12192

- 12193 a) Lumping Units.  
 12194
- 12195 1) Each owner or operator subject to the provisions of this Subpart BB must  
 12196 comply with the recordkeeping requirements of this Section.  
 12197
- 12198 2) An owner or operator of more than one hazardous waste management unit  
 12199 subject to the provisions of this Subpart BB may comply with the  
 12200 recordkeeping requirements for these hazardous waste management units

12201 in one recordkeeping system if the system identifies each record by each  
12202 hazardous waste management unit.

- 12203
- 12204 b) Owners and operators must record the following information in the facility  
12205 operating record:
  - 12206
  - 12207 1) For each piece of equipment to which this Subpart BB applies, the  
12208 following:
    - 12209
    - 12210 A) Equipment identification number and hazardous waste  
12211 management unit identification.
    - 12212
    - 12213 B) Approximate locations within the facility (e.g., identify the  
12214 hazardous waste management unit on a facility plot plan).
    - 12215
    - 12216 C) Type of equipment (e.g., a pump or pipeline valve).
    - 12217
    - 12218 D) Percent-by-weight total organics in the hazardous wastestream at  
12219 the equipment.
    - 12220
    - 12221 E) Hazardous waste state at the equipment (e.g., gas-vapor or liquid).
    - 12222
    - 12223 F) Method of compliance with the standard (e.g., "monthly leak  
12224 detection and repair" or "equipped with dual mechanical seals").
    - 12225
    - 12226 2) For facilities that comply with the provisions of Section 724.933(a)(2), an  
12227 implementation schedule, as specified in that Section.
    - 12228
    - 12229 3) Where an owner or operator chooses to use test data to demonstrate the  
12230 organic removal efficiency or total organic compound concentration  
12231 achieved by the control device, a performance test plan, as specified in  
12232 Section 724.935(b)(3).
    - 12233
    - 12234 4) Documentation of compliance with Section 724.960, including the  
12235 detailed design documentation or performance test results specified in  
12236 Section 724.935(b)(4).
    - 12237
  - 12238 c) When each leak is detected as specified in Sections 724.952, 724.953, 724.957, or  
12239 724.958, the following requirements apply:
    - 12240
    - 12241 1) A weatherproof and readily visible identification, marked with the  
12242 equipment identification number, the date evidence of a potential leak was  
12243 found in accordance with Section 724.958(a), and the date the leak was

detected, must be attached to the leaking equipment.

- 2) The identification on equipment except on a valve, may be removed after it has been repaired.
- 3) The identification on a valve may be removed after it has been monitored for two successive months as specified in Section 724.957(c) and no leak has been detected during those two months.

d) When each leak is detected as specified in Section 724.952, 724.953, 724.957, or 724.958, the following information must be recorded in an inspection log and must be kept in the facility operating record:

- 1) The instrument and operator identification numbers and the equipment identification number.
- 2) The date evidence of a potential leak was found in accordance with Section 724.958(a).
- 3) The date the leak was detected and the dates of each attempt to repair the leak.
- 4) Repair methods applied in each attempt to repair the leak.
- 5) "Above 10,000," if the maximum instrument reading measured by the methods specified in Section 724.963(b) after each repair attempt is equal to or greater than 10,000 ppm.
- 6) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- 7) Documentation supporting the delay of repair of a valve in compliance with Section 724.959(c).
- 8) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a hazardous waste management unit shutdown.
- 9) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
- 10) The date of successful repair of the leak.

- 12287  
12288  
12289  
12290  
12291  
12292  
12293  
12294  
12295  
12296  
12297  
12298  
12299  
12300  
12301  
12302  
12303  
12304  
12305  
12306  
12307  
12308  
12309  
12310  
12311  
12312  
12313  
12314  
12315  
12316  
12317  
12318  
12319  
12320  
12321  
12322  
12323  
12324  
12325  
12326  
12327  
12328  
12329
- e) Design documentation and monitoring, operating, and inspection information for each closed-vent system and control device required to comply with the provisions of Section 724.960 must be recorded and kept up-to-date in the facility operating record, as specified in Section 724.935(c)(1) and (c)(2), and monitoring, operating and inspection information in Section 724.935(c)(3) through (c)(8).
  - f) For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system, the Agency must specify the appropriate recordkeeping requirements, indicating proper operation and maintenance of the control device, in the RCRA permit.
  - g) The following information pertaining to all equipment subject to the requirements in Sections 724.952 through 724.960 must be recorded in a log that is kept in the facility operating record:
    - 1) A list of identification numbers for equipment (except welded fittings) subject to the requirements of this Subpart BB.
    - 2) List of Equipment
      - A) A list of identification numbers for equipment that the owner or operator elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 724.952(e), 724.953(i), and 724.957(f).
      - B) The designation of this equipment as subject to the requirements of Section 724.952(e), 724.953(i), or 724.957(f) must be signed by the owner or operator.
    - 3) A list of equipment identification numbers for pressure relief devices required to comply with Section 724.954(a).
    - 4) Compliance tests.
      - A) The dates of each compliance test required in Sections 724.952(e), 724.953(i), 724.954, and 724.957(f).
      - B) The background level measured during each compliance test.
      - C) The maximum instrument reading measured at the equipment during each compliance test.

- 12330  
12331  
12332  
12333  
12334  
12335  
12336  
12337  
12338  
12339  
12340  
12341  
12342  
12343  
12344  
12345  
12346  
12347  
12348  
12349  
12350  
12351  
12352  
12353  
12354  
12355  
12356  
12357  
12358  
12359  
12360  
12361  
12362  
12363  
12364  
12365  
12366  
12367  
12368  
12369  
12370  
12371  
12372
- 5) A list of identification numbers for equipment in vacuum service.
  - 6) Identification, either by list or location (area or group), of equipment that contains or contacts hazardous waste with an organic concentration of at least 10 percent by weight for less than 300 hours per year.
  - h) The following information pertaining to all valves subject to the requirements of Section 724.957(g) and (h) must be recorded in a log that is kept in the facility operating record:
    - 1) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.
    - 2) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
  - i) The following information must be recorded in the facility operating record for valves complying with Section 724.962:
    - 1) A schedule of monitoring.
    - 2) The percent of valves found leaking during each monitoring period.
  - j) The following information must be recorded in a log that is kept in the facility operating record:
    - 1) Criteria required in Sections 724.952(d)(5)(B) and 724.953(e)(2) and an explanation of the design criteria.
    - 2) Any changes to these criteria and the reasons for the changes.
  - k) The following information must be recorded in a log that is kept in the facility operating record for use in determining exemptions, as provided in Section 724.950 and other specific Subparts:
    - 1) An analysis determining the design capacity of the hazardous waste management unit.
    - 2) A statement listing the hazardous waste influent to and effluent from each hazardous waste management unit subject to the requirements in Section 724.960 and an analysis determining whether these hazardous wastes are

12373  
 12374  
 12375  
 12376  
 12377  
 12378  
 12379  
 12380  
 12381  
 12382  
 12383  
 12384  
 12385  
 12386  
 12387  
 12388  
 12389  
 12390  
 12391  
 12392  
 12393  
 12394  
 12395  
 12396  
 12397  
 12398  
 12399  
 12400  
 12401  
 12402  
 12403  
 12404  
 12405  
 12406  
 12407  
 12408  
 12409  
 12410  
 12411  
 12412  
 12413  
 12414  
 12415

heavy liquids.

3) An up-to-date analysis and the supporting information and data used to determine whether or not equipment is subject to the requirements in Sections 724.952 through 724.960. The record must include supporting documentation as required by Section 724.963(d)(3) when application of the knowledge of the nature of the hazardous wastestream or the process by which it was produced is used. If the owner or operator takes any action (e.g., changing the process that produced the waste) that could result in an increase in the total organic content of the waste contained in or contacted by equipment determined not to be subject to the requirements in Sections 724.952 through 724.960, then a new determination is required.

l) Records of the equipment leak information required by subsection (d) ~~of this Section~~ and the operating information required by subsection (e) ~~of this Section~~ need be kept only three years.

m) The owner or operator of any facility with equipment that is subject to this Subpart BB and to regulations at federal 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), or 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories), may elect to determine compliance with this Subpart BB by documentation of compliance either pursuant to Section 724.964 or by documentation of compliance with the regulations at 40 CFR 60, 61, or 63, pursuant to the relevant provisions of 40 CFR 60, 61, or 63, each incorporated by reference in 35 Ill. Adm. Code 720.111(b). The documentation of compliance under the regulation at 40 CFR 60, 61, or 63 must be kept with or made readily available with the facility operating record.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS,  
 SURFACE IMPOUNDMENTS, AND CONTAINERS

**Section 724.980 Applicability**

- a) The requirements of this Subpart CC apply to owners and operators of all facilities that treat, store, or dispose of hazardous waste in tanks, surface impoundments, or containers subject to Subpart I, J, or K ~~of this Part~~, except as Section 724.101 and subsection (b) ~~of this Section~~ provide otherwise.
- b) The requirements of this Subpart CC do not apply to the following waste

- 12416 management units at the facility:  
 12417  
 12418 1) A waste management unit that holds hazardous waste placed in the unit  
 12419 before December 6, 1996, and in which no hazardous waste is added to the  
 12420 unit on or after December 6, 1996.  
 12421  
 12422 2) A container that has a design capacity less than or equal to 0.1 m<sup>3</sup> (3.5 ft<sup>3</sup>  
 12423 or 26.4 gal).  
 12424  
 12425 3) A tank in which an owner or operator has stopped adding hazardous waste  
 12426 and the owner or operator has begun implementing or completed closure  
 12427 pursuant to an approved closure plan.  
 12428  
 12429 4) A surface impoundment in which an owner or operator has stopped adding  
 12430 hazardous waste (except to implement an approved closure plan) and the  
 12431 owner or operator has begun implementing or completed closure pursuant  
 12432 to an approved closure plan.  
 12433  
 12434 5) A waste management unit that is used solely for on-site treatment or  
 12435 storage of hazardous waste that is placed in the unit as a result of  
 12436 implementing remedial activities required pursuant to the Act or Board  
 12437 regulations or under the corrective action authorities of RCRA section  
 12438 3004(u), 3004(v), or 3008(h); CERCLA authorities; or similar federal or  
 12439 State authorities.  
 12440  
 12441 6) A waste management unit that is used solely for the management of  
 12442 radioactive mixed waste in accordance with all applicable regulations  
 12443 under the authority of the Atomic Energy Act of 1954 (42 USC 2011 et  
 12444 seq.) and the Nuclear Waste Policy Act of 1982 (42 USC 10101 et seq.).  
 12445  
 12446 7) A hazardous waste management unit that the owner or operator certifies is  
 12447 equipped with and operating air emission controls in accordance with the  
 12448 requirements of an applicable federal Clean Air Act regulation codified  
 12449 under 40 CFR 60 (Standards of Performance for New Stationary Sources),  
 12450 61 (National Emission Standards for Hazardous Air Pollutants), or 63  
 12451 (National Emission Standards for Hazardous Air Pollutants for Source  
 12452 Categories), each incorporated by reference in 35 Ill. Adm. Code  
 12453 720.111(b). For the purpose of complying with this subsection (b)(7), a  
 12454 tank for which the air emission control includes an enclosure, as opposed  
 12455 to a cover, must be in compliance with the enclosure and control device  
 12456 requirements of Section 724.984(i), except as provided in Section  
 12457 724.982(c)(5).  
 12458

- 12459 8) A tank that has a process vent, as defined in 35 Ill. Adm. Code 724.931.  
 12460  
 12461 c) ~~For the owner and operator of a facility subject to this Subpart CC and that~~  
 12462 ~~received a final RCRA permit prior to December 6, 1996, the requirements of this~~  
 12463 ~~Subpart CC must be incorporated into the permit when the permit is reissued,~~  
 12464 ~~renewed, or modified in accordance with the requirements of 35 Ill. Adm. Code~~  
 12465 ~~703 and 705. Until the date when the owner and operator receives a final permit~~  
 12466 ~~incorporating the requirements of this Subpart CC, the owner and operator are~~  
 12467 ~~subject to the requirements of Subpart CC of 35 Ill. Adm. Code 725.~~  
 12468  
 12469 d) The requirements of this Subpart CC, except for the recordkeeping requirements  
 12470 specified in Section 724.989(i), are stayed for a tank or container used for the  
 12471 management of hazardous waste generated by organic peroxide manufacturing  
 12472 and its associated laboratory operations, when the owner or operator of the unit  
 12473 meets all of the following conditions:  
 12474  
 12475 1) The owner or operator identifies that the tank or container receives  
 12476 hazardous waste generated by an organic peroxide manufacturing process  
 12477 producing more than one functional family of organic peroxides or  
 12478 multiple organic peroxides within one functional family, that one or more  
 12479 of these organic peroxides could potentially undergo self-accelerating  
 12480 thermal decomposition at or below ambient temperatures, and that organic  
 12481 peroxides are the predominant products manufactured by the process. For  
 12482 the purposes of this subsection (d), "organic peroxide" means an organic  
 12483 compound that contains the bivalent -O-O- structure and which may be  
 12484 considered to be a structural derivative of hydrogen peroxide where one or  
 12485 both of the hydrogen atoms has been replaced by an organic radical.  
 12486  
 12487 2) The owner or operator prepares documentation, in accordance with  
 12488 Section 724.989(i), explaining why an undue safety hazard would be  
 12489 created if air emission controls specified in Sections 724.984 through  
 12490 724.987 are installed and operated on the tanks and containers used at the  
 12491 facility to manage the hazardous waste generated by the organic peroxide  
 12492 manufacturing process or processes meeting the conditions of subsection  
 12493 (d)(1) ~~of this Section.~~  
 12494  
 12495 3) The owner or operator notifies the Agency in writing that hazardous waste  
 12496 generated by an organic peroxide manufacturing process or processes  
 12497 meeting the conditions of subsection (d)(1) ~~of this Section~~ are managed at  
 12498 the facility in tanks or containers meeting the conditions of subsection  
 12499 (d)(2) ~~of this Section.~~ The notification must state the name and address of  
 12500 the facility and be signed and dated by an authorized representative of the  
 12501 facility owner or operator.

12502  
12503  
12504  
12505  
12506  
12507  
12508  
12509  
12510  
12511  
12512  
12513  
12514  
12515  
12516  
12517  
12518  
12519  
12520  
12521  
12522  
12523  
12524  
12525  
12526  
12527  
12528  
12529  
12530  
12531  
12532  
12533  
12534  
12535  
12536  
12537  
12538  
12539  
12540  
12541  
12542  
12543  
12544

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.983 Waste Determination Procedures**

- a) Waste determination procedure for average volatile organic (VO) concentration of a hazardous waste at the point of waste origination.
  - 1) An owner or operator must determine the average VO concentration at the point of waste origination for each hazardous waste placed in a waste management unit exempted under the provisions of Section 724.982(c)(1) from using air emission controls in accordance with standards specified in Section 724.984 through Section 724.987, as applicable to the waste management unit.
    - A) An owner or operator must make an initial determination of the average VO concentration of the waste stream before the first time any portion of the material in the hazardous waste stream is placed in a waste management unit exempted under the provisions of Section 724.982(c)(1) from using air emission controls. Thereafter, an owner or operator must make an initial determination of the average VO concentration of the waste stream for each averaging period that a hazardous waste is managed in the unit.
    - B) An owner or operator must perform a new waste determination whenever changes to the source generating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to a level that is equal to or greater than the applicable VO concentration limits specified in Section 724.982.
  - 2) For a waste determination that is required by subsection (a)(1) ~~of this Section~~, the average VO concentration of a hazardous waste at the point of waste origination must be determined in accordance with the procedures specified in 35 Ill. Adm. Code 725.984(a)(2) through (a)(4).
- b) Waste determination procedures for treated hazardous waste.
  - 1) An owner or operator must perform the applicable waste determination for each treated hazardous waste placed in a waste management unit exempted under the provisions of Section 724.982(c)(2)(A) through (c)(2)(F) from using air emission controls in accordance with standards

12545 specified in Sections 724.984 through 724.987, as applicable to the waste  
12546 management unit.

12547  
12548 A) An owner or operator must make an initial determination of the  
12549 average VO concentration of the waste stream before the first time  
12550 any portion of the material in the treated waste stream is placed in  
12551 the exempt waste management unit. Thereafter, an owner or  
12552 operator must update the information used for the waste  
12553 determination at least once every 12 months following the date of  
12554 the initial waste determination.

12555  
12556 B) An owner or operator must perform a new waste determination  
12557 whenever changes to the process generating or treating the waste  
12558 stream are reasonably likely to cause the average VO concentration  
12559 of the hazardous waste to increase to such a level that the  
12560 applicable treatment conditions specified in Section 724.982(c)(2)  
12561 are not achieved.

12562  
12563 2) The waste determination for a treated hazardous waste must be performed  
12564 in accordance with the procedures specified in 35 Ill. Adm. Code  
12565 725.984(b)(2) through (b)(9), as applicable to the treated hazardous waste.

12566  
12567 c) Procedure to determine the maximum organic vapor pressure of a hazardous  
12568 waste in a tank.

12569  
12570 1) An owner or operator must determine the maximum organic vapor  
12571 pressure for each hazardous waste placed in a tank using Tank Level 1  
12572 controls in accordance with standards specified in Section 724.984(c).

12573  
12574 2) The maximum organic vapor pressure of the hazardous waste may be  
12575 determined in accordance with the procedures specified in 35 Ill. Adm.  
12576 Code 725.984(c)(2) through (c)(4).

12577  
12578 d) The procedure for determining no detectable organic emissions for the purpose of  
12579 complying with this Subpart CC must be conducted in accordance with the  
12580 procedures specified in 35 Ill. Adm. Code 725.984(d).

12581  
12582 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

12583  
12584 **Section 724.984 Standards: Tanks**

12585  
12586 a) The provisions of this Section apply to the control of air pollutant emissions from  
12587 tanks for which Section 724.982(b) references the use of this Section for such air

12588 emission control.  
12589

12590 b) The owner or operator must control air pollutant emissions from each tank subject  
12591 to this Section in accordance with the following requirements, as applicable:  
12592

12593 1) For a tank that manages hazardous waste that meets all of the conditions  
12594 specified in subsections (b)(1)(A) through (b)(1)(C) of this Section, the  
12595 owner or operator must control air pollutant emissions from the tank in  
12596 accordance with the Tank Level 1 controls specified in subsection (c) of  
12597 this Section or the Tank Level 2 controls specified in subsection (d) of this  
12598 Section.  
12599

12600 A) The hazardous waste in the tank has a maximum organic vapor  
12601 pressure that is less than the maximum organic vapor pressure limit  
12602 for the tank's design capacity category, as follows:  
12603

12604 i) For a tank design capacity equal to or greater than 151 m<sup>3</sup>  
12605 (39,900 gal), the maximum organic vapor pressure limit for  
12606 the tank is 5.2 kPa (0.75 psig).  
12607

12608 ii) For a tank design capacity equal to or greater than 75 m<sup>3</sup>  
12609 (19,800 gal) but less than 151 m<sup>3</sup> (39,900 gal), the  
12610 maximum organic vapor pressure limit for the tank is 27.6  
12611 kPa (4.00 psig).  
12612

12613 iii) For a tank design capacity less than 75 m<sup>3</sup> (19,800 gal), the  
12614 maximum organic vapor pressure limit for the tank is 76.6  
12615 kPa (11.1 psig).  
12616

12617 B) The hazardous waste in the tank is not heated by the owner or  
12618 operator to a temperature that is greater than the temperature at  
12619 which the maximum organic vapor pressure of the hazardous waste  
12620 is determined for the purpose of complying with subsection  
12621 (b)(1)(A) of this Section.  
12622

12623 C) The owner or operator does not treat the hazardous waste in the  
12624 tank using a waste stabilization process, as defined in 35 Ill. Adm.  
12625 Code 725.981.  
12626

12627 2) For a tank that manages hazardous waste that does not meet all of the  
12628 conditions specified in subsections (b)(1)(A) through (b)(1)(C) of this  
12629 Section, the owner or operator must control air pollutant emissions from  
12630 the tank by using Tank Level 2 controls in accordance with the

requirements of subsection (d) ~~of this Section~~. Examples of tanks required to use Tank Level 2 controls include a tank used for a waste stabilization process and a tank for which the hazardous waste in the tank has a maximum organic vapor pressure that is equal to or greater than the maximum organic vapor pressure limit for the tank's design capacity category, as specified in subsection (b)(1)(A) ~~of this Section~~.

- c) Owners and operators controlling air pollutant emissions from a tank using Tank Level 1 controls must meet the requirements specified in subsections (c)(1) through (c)(4) ~~of this Section~~:
  - 1) The owner or operator must determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank using Tank Level 1 controls before the first time the hazardous waste is placed in the tank. The maximum organic vapor pressure must be determined using the procedures specified in Section 724.983(c). Thereafter, the owner or operator must perform a new determination whenever changes to the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase to a level that is equal to or greater than the maximum organic vapor pressure limit for the tank design capacity category specified in subsection (b)(1)(A) ~~of this Section~~, as applicable to the tank.
  - 2) The tank must be equipped with a fixed roof designed to meet the following specifications:
    - A) The fixed roof and its closure devices must be designed to form a continuous barrier over the entire surface area of the hazardous waste in the tank. The fixed roof may be a separate cover installed on the tank (e.g., a removable cover mounted on an open-top tank) or may be an integral part of the tank structural design (e.g., a horizontal cylindrical tank equipped with a hatch).
    - B) The fixed roof must be installed in such a manner that there are no visible cracks, holes, gaps, or other open spaces between roof section joints or between the interface of the roof edge and the tank wall.
    - C) Either of the following must be true of each opening in the fixed roof and of any manifold system associated with the fixed roof:
      - i) The opening or manifold system is equipped with a closure device designed to operate so that when the closure device

12674  
12675  
12676  
12677  
12678  
12679  
12680  
12681  
12682  
12683  
12684  
12685  
12686  
12687  
12688  
12689  
12690  
12691  
12692  
12693  
12694  
12695  
12696  
12697  
12698  
12699  
12700  
12701  
12702  
12703  
12704  
12705  
12706  
12707  
12708  
12709  
12710  
12711  
12712  
12713  
12714  
12715  
12716

is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the opening and the closure device; or

- ii) The opening or manifold system is connected by a closed-vent system that is vented to a control device. The control device must remove or destroy organics in the vent stream, and it must be operating whenever hazardous waste is managed in the tank, except as provided for in subsection (c)(2)(E) of this Section.

- D) The fixed roof and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the fixed roof and closure devices throughout their intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices must include the following: the organic vapor permeability; the effects of any contact with the hazardous waste or its vapors managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.

- E) The control device operated pursuant to subsection (c)(2)(C) of this Section needs not remove or destroy organics in the vent stream under the following conditions:

- i) During periods when it is necessary to provide access to the tank for performing the activities of subsection (c)(2)(E)(ii) of this Section, venting of the vapor headspace underneath the fixed roof to the control device is not required, opening of closure devices is allowed, and removal of the fixed roof is allowed. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, and resume operation of the control device; and
- ii) During periods of routine inspection, maintenance, or other activities needed for normal operations, and for removal of accumulated sludge or other residues from the bottom of the tank.

BOARD NOTE: Subsections (c)(2)(E)(i) and (c)(2)(E)(ii) of this Section are derived from 40 CFR 264.1084(c)(2)(iii)(B)(1) and (c)(2)(iii)(B)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

- 3) Whenever a hazardous waste is in the tank, the fixed roof must be installed with each closure device secured in the closed position, except as follows:
  - A) Opening of closure devices or removal of the fixed roof is allowed at the following times:
    - i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
    - ii) To remove accumulated sludge or other residues from the bottom of the tank.
  - B) Opening of a spring-loaded pressure-vacuum relief valve, conservation vent, or similar type of pressure relief device that vents to the atmosphere is allowed during normal operations for the purpose of maintaining the tank internal pressure in accordance with the tank design specifications. The device must be designed to operate with no detectable organic emissions when the device is secured in the closed position. The settings at which the device opens must be established so that the device remains in the closed position whenever the tank internal pressure is within the internal pressure operating range determined by the owner or operator based on the tank manufacturer recommendations, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of flammable, ignitable, explosive, reactive, or hazardous materials. Examples of normal operating conditions that may require these devices to open are during those times when the tank internal pressure exceeds the internal pressure operating range for the tank as a result of loading operations or diurnal ambient temperature fluctuations.

12760  
12761  
12762  
12763  
12764  
12765  
12766  
12767  
12768  
12769  
12770  
12771  
12772  
12773  
12774  
12775  
12776  
12777  
12778  
12779  
12780  
12781  
12782  
12783  
12784  
12785  
12786  
12787  
12788  
12789  
12790  
12791  
12792  
12793  
12794  
12795  
12796  
12797  
12798  
12799  
12800  
12801  
12802

- C) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.
- 4) The owner or operator must inspect the air emission control equipment in accordance with the following requirements.
  - A) The fixed roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
  - B) The owner or operator must perform an initial inspection of the fixed roof and its closure devices on or before the date that the tank becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except under the special conditions provided for in subsection (l) of this Section.
  - C) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.
  - D) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).
- d) Owners and operators controlling air pollutant emissions from a tank using Tank Level 2 controls must use one of the following tanks:
  - 1) A fixed-roof tank equipped with an internal floating roof in accordance with the requirements specified in subsection (e) of this Section;
  - 2) A tank equipped with an external floating roof in accordance with the requirements specified in subsection (f) of this Section;
  - 3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in subsection (g) of this Section;
  - 4) A pressure tank designed and operated in accordance with the

requirements specified in subsection (h) ~~of this Section~~; or

5) A tank located inside an enclosure that is vented through a closed-vent system to an enclosed combustion control device in accordance with the requirements specified in subsection (i) ~~of this Section~~.

e) The owner or operator that controls air pollutant emissions from a tank using a fixed roof with an internal floating roof must meet the requirements specified in subsections (e)(1) through (e)(3) ~~of this Section~~.

1) The tank must be equipped with a fixed roof and an internal floating roof in accordance with the following requirements:

A) The internal floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.

B) The internal floating roof must be equipped with a continuous seal between the wall of the tank and the floating roof edge that meets either of the following requirements:

i) A single continuous seal that is either a liquid-mounted seal or a metallic shoe seal, as defined in 35 Ill. Adm. Code 725.981; or

ii) Two continuous seals mounted one above the other. The lower seal may be a vapor-mounted seal.

C) The internal floating roof must meet the following specifications:

i) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

ii) Each opening in the internal floating roof must be equipped with a gasketed cover or a gasketed lid except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains.

iii) Each penetration of the internal floating roof for the purpose of sampling must have a slit fabric cover that covers at least 90 percent of the opening.

- 12846  
12847  
12848  
12849  
12850  
12851  
12852  
12853  
12854  
12855  
12856
- iv) Each automatic bleeder vent and rim space vent must be gasketed.
  - v) Each penetration of the internal floating roof that allows for passage of a ladder must have a gasketed sliding cover.
  - vi) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof must have a flexible fabric sleeve seal or a gasketed sliding cover.
- 2) The owner or operator must operate the tank in accordance with the following requirements:
- A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.
  - B) Automatic bleeder vents are to be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.
  - C) Prior to filling the tank, each cover, access hatch, gauge float well or lid on any opening in the internal floating roof must be bolted or fastened closed (i.e., no visible gaps). Rim space vents must be set to open only when the internal floating roof is not floating or when the pressure beneath the rim exceeds the manufacturer's recommended setting.
- 3) The owner or operator must inspect the internal floating roof in accordance with the procedures specified as follows:
- A) The floating roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, any of the following: when the internal floating roof is not floating on the surface of the liquid inside the tank; when liquid has accumulated on top of the internal floating roof; when any portion of the roof seals have detached from the roof rim; when holes, tears, or other openings are visible in the seal fabric; when the gaskets no longer close off the hazardous waste surface from the atmosphere; or when the slotted membrane has more than 10 percent open area.
- 12857  
12858  
12859  
12860  
12861  
12862  
12863  
12864  
12865  
12866  
12867  
12868  
12869  
12870  
12871  
12872  
12873  
12874  
12875  
12876  
12877  
12878  
12879  
12880  
12881  
12882  
12883  
12884  
12885  
12886  
12887  
12888

- 12889  
12890  
12891  
12892  
12893  
12894  
12895  
12896  
12897  
12898  
12899  
12900  
12901  
12902  
12903  
12904  
12905  
12906  
12907  
12908  
12909  
12910  
12911  
12912  
12913  
12914  
12915  
12916  
12917  
12918  
12919  
12920  
12921  
12922  
12923  
12924  
12925  
12926  
12927  
12928  
12929  
12930  
12931
- B) The owner or operator must inspect the internal floating roof components as follows, except as provided in subsection (e)(3)(C) of this Section:
    - i) Visually inspect the internal floating roof components through openings on the fixed-roof (e.g., manholes and roof hatches) at least once every 12 months after initial fill, and
    - ii) Visually inspect the internal floating roof, primary seal, secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least once every 10 years.
  - C) As an alternative to performing the inspections specified in subsection (e)(3)(B) of this Section for an internal floating roof equipped with two continuous seals mounted one above the other, the owner or operator may visually inspect the internal floating roof, primary and secondary seals, gaskets, slotted membranes, and sleeve seals (if any) each time the tank is emptied and degassed and at least every five years.
  - D) Prior to each inspection required by subsection (e)(3)(B) or (e)(3)(C) of this Section, the owner or operator must notify the Agency in advance of each inspection to provide the Agency with the opportunity to have an observer present during the inspection. The owner or operator must notify the Agency of the date and location of the inspection, as follows:
    - i) Prior to each visual inspection of an internal floating roof in a tank that has been emptied and degassed, written notification must be prepared and sent by the owner or operator so that it is received by the Agency at least 30 calendar days before refilling the tank, except when an inspection is not planned, as provided for in subsection (e)(3)(D)(ii) of this Section.
    - ii) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and

12932  
12933  
12934  
12935  
12936  
12937  
12938  
12939  
12940  
12941  
12942  
12943  
12944  
12945  
12946  
12947  
12948  
12949  
12950  
12951  
12952  
12953  
12954  
12955  
12956  
12957  
12958  
12959  
12960  
12961  
12962  
12963  
12964  
12965  
12966  
12967  
12968  
12969  
12970  
12971  
12972  
12973  
12974

immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.

- E) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (k) of this Section.
  - F) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(b).
- 4) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed and operated as necessary on any tank complying with the requirements of this subsection (e).
- f) The owner or operator that controls air pollutant emissions from a tank using an external floating roof must meet the requirements specified in subsections (f)(1) through (f)(3) of this Section.
- 1) The owner or operator must design the external floating roof in accordance with the following requirements:
    - A) The external floating roof must be designed to float on the liquid surface except when the floating roof must be supported by the leg supports.
    - B) The floating roof must be equipped with two continuous seals, one above the other, between the wall of the tank and the roof edge. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
      - i) The primary seal must be a liquid-mounted seal or a metallic shoe seal, as defined in 35 Ill. Adm. Code 725.981. The total area of the gaps between the tank wall and the primary seal must not exceed 212 square centimeters (cm<sup>2</sup>) per meter (10.0 square inches (in<sup>2</sup>) per foot) of tank diameter, and the width of any portion of these gaps must not exceed 3.8 centimeters (cm) (1.5 in). If a metallic shoe seal is used for the primary seal, the metallic shoe seal must be designed so that one end extends into the liquid in the tank and the other end extends a vertical distance of at least

- 12975 61 cm (24 in) above the liquid surface.  
12976  
12977 ii) The secondary seal must be mounted above the primary  
12978 seal and cover the annular space between the floating roof  
12979 and the wall of the tank. The total area of the gaps between  
12980 the tank wall and the secondary seal must not exceed 21.2  
12981 cm<sup>2</sup> per meter (1.00 in<sup>2</sup> per foot) of tank diameter, and the  
12982 width of any portion of these gaps must not exceed 1.3 cm  
12983 (0.51 in).  
12984  
12985 C) The external floating roof must meet the following specifications:  
12986  
12987 i) Except for automatic bleeder vents (vacuum breaker vents)  
12988 and rim space vents, each opening in a noncontact external  
12989 floating roof must provide a projection below the liquid  
12990 surface.  
12991  
12992 ii) Except for automatic bleeder vents, rim space vents, roof  
12993 drains, and leg sleeves, each opening in the roof must be  
12994 equipped with a gasketed cover, seal, or lid.  
12995  
12996 iii) Each access hatch and each gauge float well must be  
12997 equipped with a cover designed to be bolted or fastened  
12998 when the cover is secured in the closed position.  
12999  
13000 iv) Each automatic bleeder vent and each rim space vent must  
13001 be equipped with a gasket.  
13002  
13003 v) Each roof drain that empties into the liquid managed in the  
13004 tank must be equipped with a slotted membrane fabric  
13005 cover that covers at least 90 percent of the area of the  
13006 opening.  
13007  
13008 vi) Each unslotted and slotted guide pole well must be  
13009 equipped with a gasketed sliding cover or a flexible fabric  
13010 sleeve seal.  
13011  
13012 vii) Each unslotted guide pole must be equipped with a  
13013 gasketed cap on the end of the pole.  
13014  
13015 viii) Each slotted guide pole must be equipped with a gasketed  
13016 float or other device that closes off the liquid surface from  
13017 the atmosphere.

- 13018  
13019  
13020  
13021  
13022  
13023  
13024  
13025  
13026  
13027  
13028  
13029  
13030  
13031  
13032  
13033  
13034  
13035  
13036  
13037  
13038  
13039  
13040  
13041  
13042  
13043  
13044  
13045  
13046  
13047  
13048  
13049  
13050  
13051  
13052  
13053  
13054  
13055  
13056  
13057  
13058  
13059  
13060
- ix) Each gauge hatch and each sample well must be equipped with a gasketed cover.
  - 2) The owner or operator must operate the tank in accordance with the following requirements:
    - A) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling must be continuous and must be completed as soon as practical.
    - B) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be secured and maintained in a closed position at all times except when the closure device must be open for access.
    - C) Covers on each access hatch and each gauge float well must be bolted or fastened when secured in the closed position.
    - D) Automatic bleeder vents must be set closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the leg supports.
    - E) Rim space vents must be set to open only at those times that the roof is being floated off the roof leg supports or when the pressure beneath the rim seal exceeds the manufacturer's recommended setting.
    - F) The cap on the end of each unslotted guide pole must be secured in the closed position at all times except when measuring the level or collecting samples of the liquid in the tank.
    - G) The cover on each gauge hatch or sample well must be secured in the closed position at all times except when the hatch or well must be opened for access.
    - H) Both the primary seal and the secondary seal must completely cover the annular space between the external floating roof and the wall of the tank in a continuous fashion except during inspections.
  - 3) The owner or operator must inspect the external floating roof in accordance with the procedures specified as follows:

- 13061 A) The owner or operator must measure the external floating roof seal
- 13062 gaps in accordance with the following requirements:
- 13063
- 13064 i) The owner or operator must perform measurements of gaps
- 13065 between the tank wall and the primary seal within 60
- 13066 calendar days after initial operation of the tank following
- 13067 installation of the floating roof and, thereafter, at least once
- 13068 every five years.
- 13069
- 13070 ii) The owner or operator must perform measurements of gaps
- 13071 between the tank wall and the secondary seal within 60
- 13072 calendar days after initial operation of the tank following
- 13073 installation of the floating roof and, thereafter, at least once
- 13074 every year.
- 13075
- 13076 iii) If a tank ceases to hold hazardous waste for a period of one
- 13077 year or more, subsequent introduction of hazardous waste
- 13078 into the tank must be considered an initial operation for the
- 13079 purposes of subsections (f)(3)(A)(i) and (f)(3)(A)(ii) ~~of this~~
- 13080 ~~Section.~~
- 13081
- 13082 iv) The owner or operator must determine the total surface area
- 13083 of gaps in the primary seal and in the secondary seal
- 13084 individually using the procedure of subsection (f)(3)(D) ~~of~~
- 13085 ~~this Section.~~
- 13086
- 13087 v) In the event that the seal gap measurements do not conform
- 13088 to the specifications in subsection (f)(1)(B) ~~of this Section,~~
- 13089 the owner or operator must repair the defect in accordance
- 13090 with the requirements of subsection (k) ~~of this Section.~~
- 13091
- 13092 vi) The owner or operator must maintain a record of the
- 13093 inspection in accordance with the requirements specified in
- 13094 Section 724.989(b).
- 13095
- 13096 B) The owner or operator must visually inspect the external floating
- 13097 roof in accordance with the following requirements:
- 13098
- 13099 i) The floating roof and its closure devices must be visually
- 13100 inspected by the owner or operator to check for defects that
- 13101 could result in air pollutant emissions. Defects include, but
- 13102 are not limited to, any of the following conditions: holes,
- 13103 tears, or other openings in the rim seal or seal fabric of the

- 13104 floating roof; a rim seal detached from the floating roof; all  
13105 or a portion of the floating roof deck being submerged  
13106 below the surface of the liquid in the tank; broken, cracked,  
13107 or otherwise damaged seals or gaskets on closure devices;  
13108 and broken or missing hatches, access covers, caps, or other  
13109 closure devices.
- 13110
- 13111 ii) The owner or operator must perform an initial inspection of  
13112 the external floating roof and its closure devices on or  
13113 before the date that the tank becomes subject to this  
13114 Section. Thereafter, the owner or operator must perform  
13115 the inspections at least once every year except for the  
13116 special conditions provided for in subsection (l) of this  
13117 Section.
- 13118
- 13119 iii) In the event that a defect is detected, the owner or operator  
13120 must repair the defect in accordance with the requirements  
13121 of subsection (k) of this Section.
- 13122
- 13123 iv) The owner or operator must maintain a record of the  
13124 inspection in accordance with the requirements specified in  
13125 Section 724.989(b).
- 13126
- 13127 C) Prior to each inspection required by subsection (f)(3)(A) or  
13128 (f)(3)(B) of this Section, the owner or operator must notify the  
13129 Agency in advance of each inspection to provide the Agency with  
13130 the opportunity to have an observer present during the inspection.  
13131 The owner or operator must notify the Agency of the date and  
13132 location of the inspection, as follows:
- 13133
- 13134 i) Prior to each inspection to measure external floating roof  
13135 seal gaps as required under subsection (f)(3)(A) of this  
13136 Section, written notification must be prepared and sent by  
13137 the owner or operator so that it is received by the Agency at  
13138 least 30 calendar days before the date the measurements are  
13139 scheduled to be performed.
- 13140
- 13141 ii) Prior to each visual inspection of an external floating roof  
13142 in a tank that has been emptied and degassed, written  
13143 notification must be prepared and sent by the owner or  
13144 operator so that it is received by the Agency at least 30  
13145 calendar days before refilling the tank, except when an  
13146 inspection is not planned as provided for in subsection

- 13147 (f)(3)(C)(iii)-of this Section.  
13148  
13149  
13150  
13151  
13152  
13153  
13154  
13155  
13156  
13157  
13158  
13159  
13160  
13161 D) Procedure for determining the total surface area of gaps in the  
13162 primary seal and the secondary seal:  
13163  
13164  
13165  
13166  
13167  
13168  
13169  
13170  
13171  
13172  
13173  
13174  
13175  
13176  
13177  
13178  
13179  
13180  
13181  
13182  
13183  
13184  
13185  
13186  
13187  
13188  
13189
- iii) When a visual inspection is not planned and the owner or operator could not have known about the inspection 30 calendar days before refilling the tank, the owner or operator must notify the Agency as soon as possible, but no later than seven calendar days before refilling of the tank. This notification may be made by telephone and immediately followed by a written explanation for why the inspection is unplanned. Alternatively, written notification, including the explanation for the unplanned inspection, may be sent so that it is received by the Agency at least seven calendar days before refilling the tank.
  - i) The seal gap measurements must be performed at one or more floating roof levels when the roof is floating off the roof supports.
  - ii) Seal gaps, if any, must be measured around the entire perimeter of the floating roof in each place where a 0.32 cm (0.125 in) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the tank and measure the circumferential distance of each such location.
  - iii) For a seal gap measured under subsection (f)(3)-of this Section, the gap surface area must be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
  - iv) The total gap area must be calculated by adding the gap surface areas determined for each identified gap location for the primary seal and the secondary seal individually, and then dividing the sum for each seal type by the nominal diameter of the tank. These total gap areas for the primary seal and secondary seal are then compared to the respective standards for the seal type, as specified in subsection (f)(1)(B)-of this Section.

BOARD NOTE: Subsections (f)(3)(D)(i) through (f)(3)(D)(iv) of this Section are derived from 40 CFR 264.1084(f)(3)(i)(D)(I) through (f)(3)(i)(D)(4), which the Board has codified here to comport with Illinois Administrative Code format requirements.

13190  
13191  
13192  
13193  
13194  
13195 4) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed  
13196 and operated as necessary on any tank complying with the requirements of  
13197 subsection (f) of this Section.  
13198

13199 g) The owner or operator that controls air pollutant emissions from a tank by venting  
13200 the tank to a control device must meet the requirements specified in subsections  
13201 (g)(1) through (g)(3) of this Section.  
13202

13203 1) The tank must be covered by a fixed roof and vented directly through a  
13204 closed-vent system to a control device in accordance with the following  
13205 requirements:  
13206

13207 A) The fixed roof and its closure devices must be designed to form a  
13208 continuous barrier over the entire surface area of the liquid in the  
13209 tank.  
13210

13211 B) Each opening in the fixed roof not vented to the control device  
13212 must be equipped with a closure device. If the pressure in the  
13213 vapor headspace underneath the fixed roof is less than atmospheric  
13214 pressure when the control device is operating, the closure device  
13215 must be designed to operate so that when the closure device is  
13216 secured in the closed position there are no visible cracks, holes,  
13217 gaps, or other open spaces in the closure device or between the  
13218 perimeter of the cover opening and the closure device. If the  
13219 pressure in the vapor headspace underneath the fixed roof is equal  
13220 to or greater than atmospheric pressure when the control device is  
13221 operating, the closure device must be designed to operate with no  
13222 detectable organic emissions.  
13223

13224 C) The fixed roof and its closure devices must be made of suitable  
13225 materials that will minimize exposure of the hazardous waste to the  
13226 atmosphere, to the extent practical, and will maintain the integrity  
13227 of the fixed roof and closure devices throughout their intended  
13228 service life. Factors to be considered when selecting the materials  
13229 for and designing the fixed roof and closure devices must include  
13230 the following: organic vapor permeability; the effects of any  
13231 contact with the liquid and its vapor managed in the tank; the  
13232 effects of outdoor exposure to wind, moisture, and sunlight; and

13233  
13234  
13235  
13236  
13237  
13238  
13239  
13240  
13241  
13242  
13243  
13244  
13245  
13246  
13247  
13248  
13249  
13250  
13251  
13252  
13253  
13254  
13255  
13256  
13257  
13258  
13259  
13260  
13261  
13262  
13263  
13264  
13265  
13266  
13267  
13268  
13269  
13270  
13271  
13272  
13273  
13274  
13275

the operating practices used for the tank on which the fixed roof is installed.

- D) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 724.987.
- 2) Whenever a hazardous waste is in the tank, the fixed roof must be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device, except as follows:
  - A) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:
    - i) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
    - ii) To remove accumulated sludge or other residues from the bottom of a tank.
  - B) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.
- 3) The owner or operator must inspect and monitor the air emission control equipment in accordance with the following procedures:
  - A) The fixed roof and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, any of the following: visible cracks, holes, or gaps in the roof sections or between the roof and the tank wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.

- 13276 B) The closed-vent system and control device must be inspected and  
13277 monitored by the owner or operator in accordance with the  
13278 procedures specified in Section 724.987.  
13279
- 13280 C) The owner or operator must perform an initial inspection of the air  
13281 emission control equipment on or before the date that the tank  
13282 becomes subject to this Section. Thereafter, the owner or operator  
13283 must perform the inspections at least once every year except for  
13284 the special conditions provided for in subsection (l) of this Section.  
13285
- 13286 D) In the event that a defect is detected, the owner or operator must  
13287 repair the defect in accordance with the requirements of subsection  
13288 (k) of this Section.  
13289
- 13290 E) The owner or operator must maintain a record of the inspection in  
13291 accordance with the requirements specified in Section 724.989(b).  
13292
- 13293 h) The owner or operator that controls air pollutant emissions by using a pressure  
13294 tank must meet the following requirements:  
13295
- 13296 1) The tank must be designed not to vent to the atmosphere as a result of  
13297 compression of the vapor headspace in the tank during filling of the tank  
13298 to its design capacity.  
13299
- 13300 2) All tank openings must be equipped with closure devices designed to  
13301 operate with no detectable organic emissions, as determined using the  
13302 procedure specified in Section 724.983(d).  
13303
- 13304 3) Whenever a hazardous waste is in the tank, the tank must be operated as a  
13305 closed-vent system that does not vent to the atmosphere, except under  
13306 either of the following two conditions:  
13307
- 13308 A) The tank does not need to be operated as a closed-vent system at  
13309 those times when the opening of a safety device, as defined in 35  
13310 Ill. Adm. Code 725.981, is required to avoid an unsafe condition.  
13311
- 13312 B) The tank does not need to be operated as a closed-vent system at  
13313 those times when the purging of inerts from the tank is required  
13314 and the purge stream is routed to a closed-vent system and control  
13315 device designed and operated in accordance with the requirements  
13316 of Section 724.987.  
13317
- 13318 i) The owner or operator that controls air pollutant emissions by using an enclosure

13319 vented through a closed-vent system to an enclosed combustion control device  
13320 must meet the requirements specified in subsections (i)(1) through (i)(4) of this  
13321 Section.

13322  
13323 1) The tank must be located inside an enclosure. The enclosure must be  
13324 designed and operated in accordance with the criteria for a permanent total  
13325 enclosure, as specified in "Procedure T – Criteria for and Verification of a  
13326 Permanent or Temporary Total Enclosure" under appendix B to 40 CFR  
13327 52.741 (VOM Measurement Techniques for Capture Efficiency),  
13328 incorporated by reference in 35 Ill. Adm. Code 720.111(b). The enclosure  
13329 may have permanent or temporary openings to allow worker access;  
13330 passage of material into or out of the enclosure by conveyor, vehicles, or  
13331 other mechanical means; entry of permanent mechanical or electrical  
13332 equipment; or direct airflow into the enclosure. The owner or operator  
13333 must perform the verification procedure for the enclosure, as specified in  
13334 Section 5.0 to "Procedure T – Criteria for and Verification of a Permanent  
13335 or Temporary Total Enclosure," initially when the enclosure is first  
13336 installed and, thereafter, annually.

13337  
13338 2) The enclosure must be vented through a closed-vent system to an enclosed  
13339 combustion control device that is designed and operated in accordance  
13340 with the standards for either a vapor incinerator, boiler, or process heater  
13341 specified in Section 724.987.

13342  
13343 3) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed  
13344 and operated as necessary on any enclosure, closed-vent system, or control  
13345 device used to comply with the requirements of subsections (i)(1) and  
13346 (i)(2) of this Section.

13347  
13348 4) The owner or operator must inspect and monitor the closed-vent system  
13349 and control device, as specified in Section 724.987.

13350  
13351 j) The owner or operator must transfer hazardous waste to a tank subject to this  
13352 Section in accordance with the following requirements:

13353  
13354 1) Transfer of hazardous waste, except as provided in subsection (j)(2) of this  
13355 Section, to the tank from another tank subject to this Section or from a  
13356 surface impoundment subject to Section 724.985 must be conducted using  
13357 continuous hard-piping or another closed system that does not allow  
13358 exposure of the hazardous waste to the atmosphere. For the purpose of  
13359 complying with this provision, an individual drain system is considered to  
13360 be a closed system when it meets the requirements of subpart RR of 40  
13361 CFR 63 (National Emission Standards for Individual Drain Systems),

13362 incorporated by reference in 35 Ill. Adm. Code 720.111(b).

13363  
13364 2) The requirements of subsection (j)(1) of this Section do not apply when  
13365 transferring a hazardous waste to the tank under any of the following  
13366 conditions:

13367  
13368 A) The hazardous waste meets the average VO concentration  
13369 conditions specified in Section 724.982(c)(1) at the point of waste  
13370 origination.

13371  
13372 B) The hazardous waste has been treated by an organic destruction or  
13373 removal process to meet the requirements in Section 724.982(c)(2).

13374  
13375 C) The hazardous waste meets the requirements of Section  
13376 724.982(c)(4).

13377  
13378 k) The owner or operator must repair each defect detected during an inspection  
13379 performed in accordance with the requirements of subsection (c)(4), (e)(3), (f)(3),  
13380 or (g)(3) of this Section, as follows:

13381  
13382 1) The owner or operator must make first efforts at repair of the defect no  
13383 later than five calendar days after detection, and repair must be completed  
13384 as soon as possible but no later than 45 calendar days after detection  
13385 except as provided in subsection (k)(2) of this Section.

13386  
13387 2) Repair of a defect may be delayed beyond 45 calendar days if the owner or  
13388 operator determines that repair of the defect requires emptying or  
13389 temporary removal from service of the tank and no alternative tank  
13390 capacity is available at the site to accept the hazardous waste normally  
13391 managed in the tank. In this case, the owner or operator must repair the  
13392 defect the next time the process or unit that is generating the hazardous  
13393 waste managed in the tank stops operation. Repair of the defect must be  
13394 completed before the process or unit resumes operation.

13395  
13396 l) Following the initial inspection and monitoring of the cover, as required by the  
13397 applicable provisions of this Subpart CC, subsequent inspection and monitoring  
13398 may be performed at intervals longer than one year under the following special  
13399 conditions:

13400  
13401 1) In the case when inspecting or monitoring the cover would expose a  
13402 worker to dangerous, hazardous, or other unsafe conditions, then the  
13403 owner or operator may designate a cover as an "unsafe to inspect and  
13404 monitor cover" and comply with all of the following requirements:

- 13405
  - 13406
  - 13407
  - 13408
  - 13409
  - 13410
  - 13411
  - 13412
  - 13413
  - 13414
  - 13415
  - 13416
  - 13417
  - 13418
  - 13419
  - 13420
  - 13421
  - 13422
  - 13423
  - 13424
  - 13425
  - 13426
  - 13427
  - 13428
  - 13429
  - 13430
  - 13431
  - 13432
  - 13433
  - 13434
  - 13435
  - 13436
  - 13437
  - 13438
  - 13439
  - 13440
  - 13441
  - 13442
  - 13443
  - 13444
  - 13445
  - 13446
  - 13447
- A) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.
- B) Develop and implement a written plan and schedule to inspect and monitor the cover, using the procedures specified in the applicable Section of this Subpart CC, as frequently as practicable during those times when a worker can safely access the cover.
- 2) In the case when a tank is buried partially or entirely underground, an owner or operator is required to inspect and monitor, as required by the applicable provisions of this Section, only those portions of the tank cover and those connections to the tank (e.g., fill ports, access hatches, gauge wells, etc.) that are located on or above the ground surface.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.985 Standards: Surface Impoundments**

- a) The provisions of this Section apply to the control of air pollutant emissions from surface impoundments for which Section 724.982(b) references the use of this Section for such air emission control.
- b) The owner or operator must control air pollutant emissions from the surface impoundment by installing and operating either of the following:
  - 1) A floating membrane cover in accordance with the provisions specified in subsection (c) of this Section; or
  - 2) A cover that is vented through a closed-vent system to a control device in accordance with the provisions specified in subsection (d) of this Section.
- c) The owner or operator that controls air pollutant emissions from a surface impoundment using a floating membrane cover must meet the requirements specified in subsections (c)(1) through (c)(3) of this Section.
  - 1) The surface impoundment must be equipped with a floating membrane cover designed to meet the following specifications:
    - A) The floating membrane cover must be designed to float on the liquid surface during normal operations and form a continuous barrier over the entire surface area of the liquid.

- 13448  
13449  
13450  
13451  
13452  
13453  
13454  
13455  
13456  
13457  
13458  
13459  
13460  
13461  
13462  
13463  
13464  
13465  
13466  
13467  
13468  
13469  
13470  
13471  
13472  
13473  
13474  
13475  
13476  
13477  
13478  
13479  
13480  
13481  
13482  
13483  
13484  
13485  
13486  
13487  
13488  
13489  
13490
- B) The cover must be fabricated from a synthetic membrane material that is either of the following:
    - i) High density polyethylene (HDPE) with a thickness no less than 2.5 millimeters (mm) (0.098 in); or
    - ii) A material or a composite of different materials determined to have both organic permeability properties that are equivalent to those of the material listed in subsection (c)(1)(B)(i) ~~of this Section~~ and chemical and physical properties that maintain the material integrity for the intended service life of the material.
  - C) The cover must be installed in such a manner that there are no visible cracks, holes, gaps, or other open spaces between cover section seams or between the interface of the cover edge and its foundation mountings.
  - D) Except as provided for in subsection (c)(1)(E) ~~of this Section~~, each opening in the floating membrane cover must be equipped with a closure device so designed as to operate that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device.
  - E) The floating membrane cover may be equipped with one or more emergency cover drains for removal of stormwater. Each emergency cover drain must be equipped with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening or a flexible fabric sleeve seal.
  - F) The closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere, to the extent practical, and will maintain the integrity of the closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of any contact with the liquid and its vapor managed in the surface impoundment; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the surface impoundment on which the floating membrane cover is installed.

- 13491  
13492  
13493  
13494  
13495  
13496  
13497  
13498  
13499  
13500  
13501  
13502  
13503  
13504  
13505  
13506  
13507  
13508  
13509  
13510  
13511  
13512  
13513  
13514  
13515  
13516  
13517  
13518  
13519  
13520  
13521  
13522  
13523  
13524  
13525  
13526  
13527  
13528  
13529  
13530  
13531  
13532  
13533
- 2) Whenever a hazardous waste is in the surface impoundment, the floating membrane cover must float on the liquid and each closure device must be secured in the closed position, except as follows:
- A) Opening of closure devices or removal of the cover is allowed at the following times:
- i) To provide access to the surface impoundment for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample the liquid in the surface impoundment, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator must promptly replace the cover and secure the closure device in the closed position, as applicable.
- ii) To remove accumulated sludge or other residues from the bottom of surface impoundment.
- B) Opening of a safety device, as defined in 35 Ill. Adm. Code 725.981, is allowed at any time conditions require doing so to avoid an unsafe condition.
- 3) The owner or operator must inspect the floating membrane cover in accordance with the following procedures:
- A) The floating membrane cover and its closure devices must be visually inspected by the owner or operator to check for defects that could result in air pollutant emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover section seams or between the interface of the cover edge and its foundation mountings; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices.
- B) The owner or operator must perform an initial inspection of the floating membrane cover and its closure devices on or before the date that the surface impoundment becomes subject to this Section. Thereafter, the owner or operator must perform the inspections at least once every year except for the special conditions provided for in subsection (g) of this Section.

13534  
13535  
13536  
13537  
13538  
13539  
13540  
13541  
13542  
13543  
13544  
13545  
13546  
13547  
13548  
13549  
13550  
13551  
13552  
13553  
13554  
13555  
13556  
13557  
13558  
13559  
13560  
13561  
13562  
13563  
13564  
13565  
13566  
13567  
13568  
13569  
13570  
13571  
13572  
13573  
13574  
13575  
13576

- C) In the event that a defect is detected, the owner or operator must repair the defect in accordance with the requirements of subsection (f) ~~of this Section~~.
  - D) The owner or operator must maintain a record of the inspection in accordance with the requirements specified in Section 724.989(c).
- d) The owner or operator that controls air pollutant emissions from a surface impoundment using a cover vented to a control device must meet the requirements specified in subsections (d)(1) through (d)(3) ~~of this Section~~.
- 1) The surface impoundment must be covered by a cover and vented directly through a closed-vent system to a control device in accordance with the following requirements:
    - A) The cover and its closure devices must be designed to form a continuous barrier over the entire surface area of the liquid in the surface impoundment.
    - B) Each opening in the cover not vented to the control device must be equipped with a closure device. If the pressure in the vapor headspace underneath the cover is less than atmospheric pressure when the control device is operating, the closure devices must be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the cover is equal to or greater than atmospheric pressure when the control device is operating, the closure device must be designed to operate with no detectable organic emissions using the procedure specified in Section 724.983(d).
    - C) The cover and its closure devices must be made of suitable materials that will minimize exposure of the hazardous waste to the atmosphere to the extent practical and which will maintain the integrity of the cover and closure devices throughout their intended service life. Factors to be considered when selecting the materials of construction and designing the cover and closure devices must include the following: the organic vapor permeability; the effects of any contact with the liquid or its vapors managed in the surface impoundment; the effects of outdoor exposure to wind, moisture,

13577 and sunlight; and the operating practices used for the surface  
13578 impoundment on which the cover is installed.

13579  
13580 D) The closed-vent system and control device must be designed and  
13581 operated in accordance with the requirements of Section 724.987.  
13582

13583 2) Whenever a hazardous waste is in the surface impoundment, the cover  
13584 must be installed with each closure device secured in the closed position  
13585 and the vapor headspace underneath the cover vented to the control  
13586 device, except as follows:  
13587

13588 A) Venting to the control device is not required, and opening of  
13589 closure devices or removal of the cover is allowed at the following  
13590 times:  
13591

13592 i) To provide access to the surface impoundment for  
13593 performing routine inspection, maintenance, or other  
13594 activities needed for normal operations. Examples of such  
13595 activities include those times when a worker needs to open  
13596 a port to sample liquid in the surface impoundment, or  
13597 when a worker needs to open a hatch to maintain or repair  
13598 equipment. Following completion of the activity, the  
13599 owner or operator must promptly secure the closure device  
13600 in the closed position or reinstall the cover, as applicable, to  
13601 the surface impoundment.  
13602

13603 ii) To remove accumulated sludge or other residues from the  
13604 bottom of the surface impoundment.  
13605

13606 B) Opening of a safety device, as defined in 35 Ill. Adm. Code  
13607 725.981, is allowed at any time conditions require doing so to  
13608 avoid an unsafe condition.  
13609

13610 3) The owner or operator must inspect and monitor the air emission control  
13611 equipment in accordance with the following procedures:  
13612

13613 A) The surface impoundment cover and its closure devices must be  
13614 visually inspected by the owner or operator to check for defects  
13615 that could result in air pollutant emissions. Defects include, but  
13616 are not limited to, visible cracks, holes, or gaps in the cover section  
13617 seams or between the interface of the cover edge and its foundation  
13618 mountings; broken, cracked, or otherwise damaged seals or gaskets  
13619 on closure devices; and broken or missing hatches, access covers,

- 13620 caps, or other closure devices.
- 13621
- 13622 B) The closed-vent system and control device must be inspected and
- 13623 monitored by the owner or operator in accordance with the
- 13624 procedures specified in Section 724.987.
- 13625
- 13626 C) The owner or operator must perform an initial inspection of the air
- 13627 emission control equipment on or before the date that the surface
- 13628 impoundment becomes subject to this Section. Thereafter, the
- 13629 owner or operator must perform the inspections at least once every
- 13630 year except for the special conditions provided for in subsection
- 13631 (g) of this Section.
- 13632
- 13633 D) In the event that a defect is detected, the owner or operator must
- 13634 repair the defect in accordance with the requirements of subsection
- 13635 (f) of this Section.
- 13636
- 13637 E) The owner or operator must maintain a record of the inspection in
- 13638 accordance with the requirements specified in Section 724.989(c).
- 13639
- 13640 e) The owner or operator must transfer hazardous waste to a surface impoundment
- 13641 subject to this Section in accordance with the following requirements:
- 13642
- 13643 1) Transfer of hazardous waste, except as provided in subsection (e)(2) of
- 13644 this Section, to the surface impoundment from another surface
- 13645 impoundment subject to this Section or from a tank subject to Section
- 13646 724.984 must be conducted using continuous hard-piping or another
- 13647 closed system that does not allow exposure of the waste to the atmosphere.
- 13648 For the purpose of complying with this provision, an individual drain
- 13649 system is considered to be a closed system when it meets the requirements
- 13650 of subpart RR of 40 CFR 63 (National Emission Standards for Individual
- 13651 Drain Systems), incorporated by reference in 35 Ill. Adm. Code
- 13652 720.111(b).
- 13653
- 13654 2) The requirements of subsection (e)(1) of this Section do not apply when
- 13655 transferring a hazardous waste to the surface impoundment under any of
- 13656 the following conditions:
- 13657
- 13658 A) The hazardous waste meets the average VO concentration
- 13659 conditions specified in Section 724.982(c)(1) at the point of waste
- 13660 origination.
- 13661
- 13662 B) The hazardous waste has been treated by an organic destruction or

13663 removal process to meet the requirements in Section 724.982(c)(2).

13664

13665

13666

13667

13668

13669

13670

13671

13672

13673

13674

13675

13676

13677

13678

13679

13680

13681

13682

13683

13684

13685

13686

13687

13688

13689

13690

13691

13692

13693

13694

13695

13696

13697

13698

13699

13700

13701

13702

13703

13704

13705

C) The hazardous waste meets the requirements of Section 724.982(c)(4).

f) The owner or operator must repair each defect detected during an inspection performed in accordance with the requirements of subsection (c)(3) or (d)(3) of this Section as follows:

1) The owner or operator must make first efforts at repair of the defect no later than five calendar days after detection and repair must be completed as soon as possible but no later than 45 calendar days after detection except as provided in subsection (f)(2) of this Section.

2) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the surface impoundment and no alternative capacity is available at the site to accept the hazardous waste normally managed in the surface impoundment. In this case, the owner or operator must repair the defect the next time the process or unit that is generating the hazardous waste managed in the surface impoundment stops operation. Repair of the defect must be completed before the process or unit resumes operation.

g) Following the initial inspection and monitoring of the cover, as required by the applicable provisions of this Subpart CC, subsequent inspection and monitoring may be performed at intervals longer than one year in the case when inspecting or monitoring the cover would expose a worker to dangerous, hazardous, or other unsafe conditions. In this case, the owner or operator may designate the cover as an "unsafe to inspect and monitor cover" and comply with all of the following requirements:

1) Prepare a written explanation for the cover stating the reasons why the cover is unsafe to visually inspect or to monitor, if required.

2) Develop and implement a written plan and schedule to inspect and monitor the cover using the procedures specified in the applicable Section of this Subpart CC as frequently as practicable during those times when a worker can safely access the cover.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.986 Standards: Containers**

13706  
13707  
13708  
13709  
13710  
13711  
13712  
13713  
13714  
13715  
13716  
13717  
13718  
13719  
13720  
13721  
13722  
13723  
13724  
13725  
13726  
13727  
13728  
13729  
13730  
13731  
13732  
13733  
13734  
13735  
13736  
13737  
13738  
13739  
13740  
13741  
13742  
13743  
13744  
13745  
13746  
13747  
13748

- a) The provisions of this Section apply to the control of air pollutant emissions from containers for which Section 724.982(b) references the use of this Section for such air emission control.
  
- b) General Requirements.
  - 1) The owner or operator must control air pollutant emissions from each container subject to this Section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in subsection (b)(2) apply to the container.
    - A) For a container having a design capacity greater than 0.1 m<sup>3</sup> (26 gal) and less than or equal to 0.46 m<sup>3</sup> (120 gal), the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c).
    - B) For a container having a design capacity greater than 0.46 m<sup>3</sup> (120 gal) that is not in light material service, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 1 standards specified in subsection (c).
    - C) For a container having a design capacity greater than 0.46 m<sup>3</sup> (120 gal) that is in light material service, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 2 standards specified in subsection (d).
  - 2) When a container having a design capacity greater than 0.1 m<sup>3</sup> (26 gal) is used for treatment of a hazardous waste by a waste stabilization process, the owner or operator must control air pollutant emissions from the container in accordance with the Container Level 3 standards specified in subsection (e) ~~of this Section~~ at those times during the waste stabilization process when the hazardous waste in the container is exposed to the atmosphere.
  
- c) Container Level 1 Standards.
  - 1) A container using Container Level 1 controls is one of the following:
    - A) A container that meets the applicable USDOT regulations on packaging hazardous materials for transportation, as specified in

subsection (f).

13749  
 13750  
 13751 B) A container equipped with a cover and closure devices that form a  
 13752 continuous barrier over the container openings so that when the  
 13753 cover and closure devices are secured in the closed position there  
 13754 are no visible holes, gaps, or other open spaces into the interior of  
 13755 the container. The cover may be a separate cover installed on the  
 13756 container (e.g., a lid on a drum or a suitably secured tarp on a roll-  
 13757 off box) or may be an integral part of the container structural  
 13758 design (e.g., a "portable tank" or bulk cargo container equipped  
 13759 with a screw-type cap).  
 13760

13761 C) An open-top container in which an organic-vapor suppressing  
 13762 barrier is placed on or over the hazardous waste in the container so  
 13763 that no hazardous waste is exposed to the atmosphere. One  
 13764 example of such a barrier is application of a suitable organic-vapor  
 13765 suppressing foam.  
 13766

13767 2) A container used to meet the requirements of subsection (c)(1)(B) or  
 13768 (c)(1)(C) must be equipped with covers and closure devices, as applicable  
 13769 to the container, that are composed of suitable materials to minimize  
 13770 exposure of the hazardous waste to the atmosphere and to maintain the  
 13771 equipment integrity for as long as it is in service. Factors to be considered  
 13772 in selecting the materials of construction and designing the cover and  
 13773 closure devices must include the following: the organic vapor  
 13774 permeability; the effects of contact with the hazardous waste or its vapor  
 13775 managed in the container; the effects of outdoor exposure of the closure  
 13776 device or cover material to wind, moisture, and sunlight; and the operating  
 13777 practices for which the container is intended to be used.  
 13778

13779 3) Whenever a hazardous waste is in a container using Container Level 1  
 13780 controls, the owner or operator must install all covers and closure devices  
 13781 for the container, as applicable to the container, and secure and maintain  
 13782 each closure device in the closed position, except as follows:  
 13783

13784 A) Opening of a closure device or cover is allowed for the purpose of  
 13785 adding hazardous waste or other material to the container, as  
 13786 follows:  
 13787

13788 i) If the container is filled to the intended final level in one  
 13789 continuous operation, the owner or operator must promptly  
 13790 secure the closure devices in the closed position and install  
 13791 the covers, as applicable to the container, upon conclusion

- 13792 of the filling operation.  
13793  
13794 ii) If discrete quantities or batches of material intermittently  
13795 are added to the container over a period of time, the owner  
13796 or operator must promptly secure the closure devices in the  
13797 closed position and install covers, as applicable to the  
13798 container, upon either the container being filled to the  
13799 intended final level; the completion of a batch loading after  
13800 which no additional material will be added to the container  
13801 within 15 minutes; the person performing the loading  
13802 operation leaving the immediate vicinity of the container;  
13803 or the shutdown of the process generating the material  
13804 being added to the container, whichever condition occurs  
13805 first.  
13806  
13807 B) Opening of a closure device or cover is allowed for the purpose of  
13808 removing hazardous waste from the container, as follows:  
13809  
13810 i) For the purpose of meeting the requirements of this  
13811 Section, an empty container, as defined in 35 Ill. Adm.  
13812 Code 721.107(b), may be open to the atmosphere at any  
13813 time (i.e., covers and closure devices are not required to be  
13814 secured in the closed position on an empty container).  
13815  
13816 ii) If discrete quantities or batches of material are removed  
13817 from the container but the container does not meet the  
13818 conditions to be an empty container, as defined in 35 Ill.  
13819 Adm. Code 721.107(b), the owner or operator must  
13820 promptly secure the closure devices in the closed position  
13821 and install covers, as applicable to the container, upon the  
13822 completion of a batch removal after which no additional  
13823 material will be removed from the container within 15  
13824 minutes or the person performing the unloading operation  
13825 leaves the immediate vicinity of the container, whichever  
13826 condition occurs first.  
13827  
13828 C) Opening of a closure device or cover is allowed when access inside  
13829 the container is needed to perform routine activities other than  
13830 transfer of hazardous waste. Examples of such activities include  
13831 those times when a worker needs to open a port to measure the  
13832 depth of or sample the material in the container, or when a worker  
13833 needs to open a manhole hatch to access equipment inside the  
13834 container. Following completion of the activity, the owner or

- 13835 operator must promptly secure the closure device in the closed  
13836 position or reinstall the cover, as applicable to the container.  
13837
- 13838 D) Opening of a spring-loaded pressure-vacuum relief valve,  
13839 conservation vent, or similar type of pressure relief device that  
13840 vents to the atmosphere is allowed during normal operations for  
13841 the purpose of maintaining the internal pressure of the container in  
13842 accordance with the container design specifications. The device  
13843 must be designed to operate with no detectable organic emissions  
13844 when the device is secured in the closed position. The settings at  
13845 which the device opens must be established so that the device  
13846 remains in the closed position whenever the internal pressure of the  
13847 container is within the internal pressure operating range  
13848 determined by the owner or operator based on container  
13849 manufacturer recommendations, applicable regulations, fire  
13850 protection and prevention codes, standard engineering codes and  
13851 practices, or other requirements for the safe handling of  
13852 flammable, ignitable, explosive, reactive, or hazardous materials.  
13853 Examples of normal operating conditions that may require these  
13854 devices to open are during those times when the internal pressure  
13855 of the container exceeds the internal pressure operating range for  
13856 the container as a result of loading operations or diurnal ambient  
13857 temperature fluctuations.  
13858
- 13859 E) Opening of a safety device, as defined in 35 Ill. Adm. Code  
13860 725.981, is allowed at any time conditions require doing so to  
13861 avoid an unsafe condition.  
13862
- 13863 4) The owner or operator of containers using Container Level 1 controls must  
13864 inspect the containers and their covers and closure devices, as follows:  
13865
- 13866 A) If a hazardous waste already is in the container at the time the  
13867 owner or operator first accepts possession of the container at the  
13868 facility and the container is not emptied within 24 hours after the  
13869 container is accepted at the facility (i.e., it does not meet the  
13870 conditions for an empty container, as specified in 35 Ill. Adm.  
13871 Code 721.107(b)), the owner or operator must visually inspect the  
13872 container and its cover and closure devices to check for visible  
13873 cracks, holes, gaps, or other open spaces into the interior of the  
13874 container when the cover and closure devices are secured in the  
13875 closed position. The container visual inspection must be  
13876 conducted on or before the date on which the container is accepted  
13877 at the facility (i.e., the date when the container becomes subject to

- 13878 the Subpart CC container standards). For the purposes of this  
 13879 requirement, the date of acceptance is the date of signature that the  
 13880 facility owner or operator enters on Item 20 of the Uniform  
 13881 Hazardous Waste Manifest, as set forth in the appendix to 40 CFR  
 13882 262 (Uniform Hazardous Waste Manifest and Instructions (EPA  
 13883 Forms 8700-22 and 8700-22A and Their Instructions)),  
 13884 incorporated by reference in 35 Ill. Adm. Code 720.111(b)  
 13885 (USEPA Forms 8700-22 and 8700-22A), as required under Section  
 13886 724.171. If a defect is detected, the owner or operator must repair  
 13887 the defect in accordance with the requirements of subsection  
 13888 (c)(4)(C).  
 13889
- 13890 B) If a container used for managing hazardous waste remains at the  
 13891 facility for a period of one year or more, the owner or operator  
 13892 must visually inspect the container and its cover and closure  
 13893 devices initially and thereafter, at least once every 12 months, to  
 13894 check for visible cracks, holes, gaps, or other open spaces into the  
 13895 interior of the container when the cover and closure devices are  
 13896 secured in the closed position. If a defect is detected, the owner or  
 13897 operator must repair the defect in accordance with the  
 13898 requirements of subsection (c)(4)(C).  
 13899
- 13900 C) When a defect is detected for the container, cover, or closure  
 13901 devices, the owner or operator must make first efforts at repair of  
 13902 the defect no later than 24 hours after detection and repair must be  
 13903 completed as soon as possible but no later than five calendar days  
 13904 after detection. If repair of a defect cannot be completed within  
 13905 five calendar days, then the hazardous waste must be removed  
 13906 from the container and the container must not be used to manage  
 13907 hazardous waste until the defect is repaired.  
 13908
- 13909 5) The owner or operator must maintain at the facility a copy of the  
 13910 procedure used to determine that containers with capacity of 0.46 m<sup>3</sup> (120  
 13911 gal) or greater that do not meet applicable USDOT regulations, as  
 13912 specified in subsection (f), are not managing hazardous waste in light  
 13913 material service.  
 13914
- 13915 d) Container Level 2 Standards.
- 13916
- 13917 1) A container using Container Level 2 controls is one of the following:
- 13918
- 13919 A) A container that meets the applicable USDOT regulations on  
 13920 packaging hazardous materials for transportation, as specified in

- 13921 subsection (f).  
 13922  
 13923 B) A container that operates with no detectable organic emissions, as  
 13924 defined in 35 Ill. Adm. Code 725.981, and determined in  
 13925 accordance with the procedure specified in subsection (g).  
 13926  
 13927 C) A container that has been demonstrated within the preceding 12  
 13928 months to be vapor-tight by using Reference Method 27  
 13929 (Determination of Vapor Tightness of Gasoline Delivery Tank  
 13930 Using Pressure-Vacuum Test) in appendix A to 40 CFR 60 (Test  
 13931 Methods), incorporated by reference in 35 Ill. Adm. Code  
 13932 720.111(b), in accordance with the procedure specified in  
 13933 subsection (h).  
 13934  
 13935 2) Transfer of hazardous waste in or out of a container using Container Level  
 13936 2 controls must be conducted in such a manner as to minimize exposure of  
 13937 the hazardous waste to the atmosphere, to the extent practical, considering  
 13938 the physical properties of the hazardous waste and good engineering and  
 13939 safety practices for handling flammable, ignitable, explosive, reactive, or  
 13940 other hazardous materials. Examples of container loading procedures that  
 13941 the USEPA considers to meet the requirements of this subsection (d)(2)  
 13942 include using any one of the following: a submerged-fill pipe or other  
 13943 submerged-fill method to load liquids into the container; a vapor-  
 13944 balancing system or a vapor-recovery system to collect and control the  
 13945 vapors displaced from the container during filling operations; or a fitted  
 13946 opening in the top of a container through which the hazardous waste is  
 13947 filled and subsequently purging the transfer line before removing it from  
 13948 the container opening.  
 13949  
 13950 3) Whenever a hazardous waste is in a container using Container Level 2  
 13951 controls, the owner or operator must install all covers and closure devices  
 13952 for the container, and secure and maintain each closure device in the  
 13953 closed position, except as follows:  
 13954  
 13955 A) Opening of a closure device or cover is allowed for the purpose of  
 13956 adding hazardous waste or other material to the container, as  
 13957 follows:  
 13958  
 13959 i) If the container is filled to the intended final level in one  
 13960 continuous operation, the owner or operator must promptly  
 13961 secure the closure devices in the closed position and install  
 13962 the covers, as applicable to the container, upon conclusion  
 13963 of the filling operation.

13964  
13965  
13966  
13967  
13968  
13969  
13970  
13971  
13972  
13973  
13974  
13975  
13976  
13977  
13978  
13979  
13980  
13981  
13982  
13983  
13984  
13985  
13986  
13987  
13988  
13989  
13990  
13991  
13992  
13993  
13994  
13995  
13996  
13997  
13998  
13999  
14000  
14001  
14002  
14003  
14004  
14005  
14006

- ii) If discrete quantities or batches of material intermittently are added to the container over a period of time, the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon whichever of the following conditions occurs first: the container, being filled to the intended final level; the completion of a batch loading after which no additional material will be added to the container within 15 minutes; the person performing the loading operation leaving the immediate vicinity of the container; or the shutdown of the process generating the material being added to the container.
  
- B) Opening of a closure device or cover is allowed for the purpose of removing hazardous waste from the container, as follows:
  - i) For the purpose of meeting the requirements of this Section, an empty container, as defined in 35 Ill. Adm. Code 721.107(b), may be open to the atmosphere at any time (i.e., covers and closure devices are not required to be secured in the closed position on an empty container).
  
  - ii) If discrete quantities or batches of material are removed from the container but the container does not meet the conditions to be an empty container, as defined in 35 Ill. Adm. Code 721.107(b), the owner or operator must promptly secure the closure devices in the closed position and install covers, as applicable to the container, upon the completion of a batch removal after which no additional material will be removed from the container within 15 minutes or the person performing the unloading operation leaves the immediate vicinity of the container, whichever condition occurs first.
  
- C) Opening of a closure device or cover is allowed when access inside the container is needed to perform routine activities other than transfer of hazardous waste. Examples of such activities include those times when a worker needs to open a port to measure the depth of or sample the material in the container, or when a worker needs to open a manhole hatch to access equipment inside the container. Following completion of the activity, the owner or operator must promptly secure the closure device in the closed

- 14007 position or reinstall the cover, as applicable to the container.  
 14008  
 14009 D) Opening of a spring-loaded, pressure-vacuum relief valve,  
 14010 conservation vent, or similar type of pressure relief device that  
 14011 vents to the atmosphere is allowed during normal operations for  
 14012 the purpose of maintaining the internal pressure of the container in  
 14013 accordance with the container design specifications. The device  
 14014 must be designed to operate with no detectable organic emission  
 14015 when the device is secured in the closed position. The settings at  
 14016 which the device opens must be established so that the device  
 14017 remains in the closed position whenever the internal pressure of the  
 14018 container is within the internal pressure operating range  
 14019 determined by the owner or operator based on container  
 14020 manufacturer recommendations, applicable regulations, fire  
 14021 protection and prevention codes, standard engineering codes and  
 14022 practices, or other requirements for the safe handling of  
 14023 flammable, ignitable, explosive, reactive, or hazardous materials.  
 14024 Examples of normal operating conditions that may require these  
 14025 devices to open are during those times when the internal pressure  
 14026 of the container exceeds the internal pressure operating range for  
 14027 the container as a result of loading operations or diurnal ambient  
 14028 temperature fluctuations.  
 14029  
 14030 E) Opening of a safety device, as defined in 35 Ill. Adm. Code  
 14031 725.981, is allowed at any time conditions require doing so to  
 14032 avoid an unsafe condition.  
 14033  
 14034 4) The owner or operator of containers using Container Level 2 controls must  
 14035 inspect the containers and their covers and closure devices, as follows:  
 14036  
 14037 A) If a hazardous waste already is in the container at the time the  
 14038 owner or operator first accepts possession of the container at the  
 14039 facility and the container is not emptied within 24 hours after the  
 14040 container is accepted at the facility (i.e., it does not meet the  
 14041 conditions for an empty container as specified in 35 Ill. Adm. Code  
 14042 721.107(b)), the owner or operator must visually inspect the  
 14043 container and its cover and closure devices to check for visible  
 14044 cracks, holes, gaps, or other open spaces into the interior of the  
 14045 container when the cover and closure devices are secured in the  
 14046 closed position. The container visual inspection must be  
 14047 conducted on or before the date on which the container is accepted  
 14048 at the facility (i.e., the date when the container becomes subject to  
 14049 the Subpart CC container standards). For the purposes of this

14050 requirement, the date of acceptance is the date of signature that the  
 14051 facility owner or operator enters on Item 20 of the Uniform  
 14052 Hazardous Waste Manifest, in the appendix to 40 CFR 262  
 14053 (Uniform Hazardous Waste Manifest and Instructions (USEPA  
 14054 Forms 8700-22 and 8700-22A and Their Instructions)), as required  
 14055 under Section 724.171. If a defect is detected, the owner or  
 14056 operator must repair the defect in accordance with the  
 14057 requirements of subsection (d)(4)(C).  
 14058

14059 B) If a container used for managing hazardous waste remains at the  
 14060 facility for a period of one year or more, the owner or operator  
 14061 must visually inspect the container and its cover and closure  
 14062 devices initially and thereafter, at least once every 12 months, to  
 14063 check for visible cracks, holes, gaps, or other open spaces into the  
 14064 interior of the container when the cover and closure devices are  
 14065 secured in the closed position. If a defect is detected, the owner or  
 14066 operator must repair the defect in accordance with the  
 14067 requirements of subsection (d)(4)(C).  
 14068

14069 C) When a defect is detected for the container, cover, or closure  
 14070 devices, the owner or operator must make first efforts at repair of  
 14071 the defect no later than 24 hours after detection, and repair must be  
 14072 completed as soon as possible but no later than five calendar days  
 14073 after detection. If repair of a defect cannot be completed within  
 14074 five calendar days, then the hazardous waste must be removed  
 14075 from the container and the container must not be used to manage  
 14076 hazardous waste until the defect is repaired.  
 14077

14078 e) Container Level 3 Standards.

14079  
 14080 1) A container using Container Level 3 controls is one of the following:

14081 A) A container that is vented directly through a closed-vent system to  
 14082 a control device in accordance with the requirements of subsection  
 14083 (e)(2)(B).  
 14084

14085 B) A container that is vented inside an enclosure that is exhausted  
 14086 through a closed-vent system to a control device in accordance  
 14087 with the requirements of subsections (e)(2)(A) and (e)(2)(B).  
 14088

14089  
 14090 2) The owner or operator must meet the following requirements, as  
 14091 applicable to the type of air emission control equipment selected by the  
 14092 owner or operator:

- 14093  
 14094  
 14095  
 14096  
 14097  
 14098  
 14099  
 14100  
 14101  
 14102  
 14103  
 14104  
 14105  
 14106  
 14107  
 14108  
 14109  
 14110  
 14111  
 14112  
 14113  
 14114  
 14115  
 14116  
 14117  
 14118  
 14119  
 14120  
 14121  
 14122  
 14123  
 14124  
 14125  
 14126  
 14127  
 14128  
 14129  
 14130  
 14131  
 14132  
 14133  
 14134  
 14135
- A) The container enclosure must be designed and operated in accordance with the criteria for a permanent total enclosure, as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The enclosure may have permanent or temporary openings to allow worker access; passage of containers through the enclosure by conveyor or other mechanical means; entry of permanent mechanical or electrical equipment; or direct airflow into the enclosure. The owner or operator must perform the verification procedure for the enclosure, as specified in Section 5.0 of the "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure," initially when the enclosure is first installed and, thereafter, annually.
  - B) The closed-vent system and control device must be designed and operated in accordance with the requirements of Section 724.987.
- 3) Safety devices, as defined in 35 Ill. Adm. Code 725.981, may be installed and operated as necessary on any container, enclosure, closed-vent system, or control device used to comply with the requirements of subsection (e)(1).
  - 4) Owners and operators using Container Level 3 controls in accordance with the provisions of this Subpart CC must inspect and monitor the closed-vent systems and control devices, as specified in Section 724.987.
  - 5) Owners and operators that use Container Level 3 controls in accordance with the provisions of this Subpart CC must prepare and maintain the records specified in Section 724.989(d).
  - 6) The transfer of hazardous waste into or out of a container using Container Level 3 controls must be conducted in such a manner as to minimize exposure of the hazardous waste to the atmosphere, to the extent practical considering the physical properties of the hazardous waste and good engineering and safety practices for handling flammable, ignitable, explosive, reactive, or other hazardous materials. Examples of container loading procedures that USEPA considers to meet the requirements of this subsection (e)(6) include using any one of the following: the use of a submerged-fill pipe or other submerged-fill method to load liquids into the container; the use of a vapor-balancing system or a vapor-recovery system

14136 to collect and control the vapors displaced from the container during  
 14137 filling operations; or the use of a fitted opening in the top of a container  
 14138 through which the hazardous waste is filled and subsequently purging the  
 14139 transfer line before removing it from the container opening.  
 14140

14141 f) For the purpose of compliance with subsection (c)(1)(A) or (d)(1)(A), containers  
 14142 must be used that meet the applicable USDOT regulations on packaging  
 14143 hazardous materials for transportation, as follows:  
 14144

14145 1) The container meets the applicable requirements specified by USDOT in  
 14146 49 CFR 178 (Specifications for Packaging), or 49 CFR 179  
 14147 (Specifications for Tank Cars), each incorporated by reference in 35 Ill.  
 14148 Adm. Code 720.111(b).  
 14149

14150 2) Hazardous waste is managed in the container in accordance with the  
 14151 applicable requirements specified by USDOT in subpart B of 49 CFR 107  
 14152 (Exemptions), 49 CFR 172 (Hazardous Materials Table, Special  
 14153 Provisions, Hazardous Materials Communications, Emergency Response  
 14154 Information, and Training Requirements), 49 CFR 173 (Shippers –  
 14155 General Requirements for Shipments and Packages), and 49 CFR 180  
 14156 (Continuing Qualification and Maintenance of Packagings), each  
 14157 incorporated by reference in 35 Ill. Adm. Code 720.111(b).  
 14158

14159 3) For the purpose of complying with this Subpart CC, no exceptions to the  
 14160 49 CFR 178 or 179 regulations are allowed, except as provided for in  
 14161 subsection (f)(4).  
 14162

14163 4) For a lab pack that is managed in accordance with the USDOT  
 14164 requirements of 49 CFR 178 (Specifications for Packagings), for the  
 14165 purpose of complying with this Subpart CC, an owner or operator may  
 14166 comply with the exceptions for combination packagings specified by  
 14167 USDOT in 49 CFR 173.12(b) (Exceptions for Shipments of Waste  
 14168 Materials), incorporated by reference in 35 Ill. Adm. Code 720.111(b).  
 14169

14170 g) To determine compliance with the no detectable organic emissions requirement of  
 14171 subsection (d)(1)(B), the procedure specified in Section 724.983(d) must be used.  
 14172

14173 1) Each potential leak interface (i.e., a location where organic vapor leakage  
 14174 could occur) on the container, its cover, and associated closure devices, as  
 14175 applicable to the container, must be checked. Potential leak interfaces that  
 14176 are associated with containers include, but are not limited to, the  
 14177 following: the interface of the cover rim and the container wall; the  
 14178 periphery of any opening on the container or container cover and its

- 14179 associated closure device; and the sealing seat interface on a spring-loaded  
 14180 pressure-relief valve.  
 14181  
 14182 2) The test must be performed when the container is filled with a material  
 14183 having a volatile organic concentration representative of the range of  
 14184 volatile organic concentrations for the hazardous wastes expected to be  
 14185 managed in this type of container. During the test, the container cover and  
 14186 closure devices must be secured in the closed position.  
 14187  
 14188 h) Procedure for determining a container to be vapor-tight using Reference Method  
 14189 27 for the purpose of complying with subsection (d)(1)(C).  
 14190  
 14191 1) The test must be performed in accordance with Reference Method 27.  
 14192  
 14193 2) A pressure measurement device must be used that has a precision of  $\pm 2.5$   
 14194 mm (0.098 in) water and that is capable of measuring above the pressure  
 14195 at which the container is to be tested for vapor tightness.  
 14196  
 14197 3) If the test results determined by Reference Method 27 indicate that the  
 14198 container sustains a pressure change less than or equal to 0.75 kPa (0.11  
 14199 psig) within five minutes after it is pressurized to a minimum of 4.5 kPa  
 14200 (0.65 psig), then the container is determined to be vapor-tight.  
 14201

14202 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 14203

14204 **Section 724.987 Standards: Closed-Vent Systems and Control Devices**  
 14205

- 14206 a) This Section applies to each closed-vent system and control device installed and  
 14207 operated by the owner or operator to control air emissions in accordance with  
 14208 standards of this Subpart CC.  
 14209  
 14210 b) The closed-vent system must meet the following requirements:  
 14211  
 14212 1) The closed-vent system must route the gases, vapors, and fumes emitted  
 14213 from the hazardous waste in the waste management unit to a control  
 14214 device that meets the requirements specified in subsection (c) of this  
 14215 Section.  
 14216  
 14217 2) The closed-vent system must be designed and operated in accordance with  
 14218 the requirements specified in Section 724.933(k).  
 14219  
 14220 3) When the closed-vent system includes bypass devices that could be used  
 14221 to divert the gas or vapor stream to the atmosphere before entering the

control device, each bypass device must be equipped with either a flow indicator, as specified in subsection (b)(3)(A) ~~of this Section~~, or a seal or locking device, as specified in subsection (b)(3)(B) ~~of this Section~~. For the purpose of complying with this subsection (b), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, spring-loaded pressure-relief valves, and other fittings used for safety purposes are not considered to be bypass devices.

A) If a flow indicator is used to comply with this subsection (b)(3), the indicator must be installed at the inlet to the bypass line used to divert gases and vapors from the closed-vent system to the atmosphere at a point upstream of the control device inlet. For the purposes of this subsection (b), a flow indicator means a device that indicates the presence of either gas or vapor flow in the bypass line.

B) If a seal or locking device is used to comply with subsection (b)(3) of this Section, the device must be placed on the mechanism by which the bypass device position is controlled (e.g., valve handle or damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve. The owner or operator must visually inspect the seal or closure mechanism at least once every month to verify that the bypass mechanism is maintained in the closed position.

4) The closed-vent system must be inspected and monitored by the owner or operator in accordance with the procedure specified in Section 724.933(l).

c) The control device must meet the following requirements:

1) The control device must be one of the following devices:

A) A control device designed and operated to reduce the total organic content of the inlet vapor stream vented to the control device by at least 95 percent by weight;

B) An enclosed combustion device designed and operated in accordance with the requirements of Section 724.933(c); or

C) A flare designed and operated in accordance with the requirements of Section 724.933(d).

14265  
 14266  
 14267  
 14268  
 14269  
 14270  
 14271  
 14272  
 14273  
 14274  
 14275  
 14276  
 14277  
 14278  
 14279  
 14280  
 14281  
 14282  
 14283  
 14284  
 14285  
 14286  
 14287  
 14288  
 14289  
 14290  
 14291  
 14292  
 14293  
 14294  
 14295  
 14296  
 14297  
 14298  
 14299  
 14300  
 14301  
 14302  
 14303  
 14304  
 14305  
 14306  
 14307

- 2) The owner or operator that elects to use a closed-vent system and control device to comply with the requirements of this Section must comply with the requirements specified in subsections (c)(2)(A) through (c)(2)(F) of this Section.
  - A) Periods of planned routine maintenance of the control device, during which the control device does not meet the specifications of ~~subsection~~ subsections (c)(1)(A), (c)(1)(B), or (c)(1)(C) of this Section, as applicable, must not exceed 240 hours per year.
  - B) The specifications and requirements in subsections (c)(1)(A), (c)(1)(B), and (c)(1)(C) of this Section for control devices do not apply during periods of planned routine maintenance.
  - C) The specifications and requirements in subsections (c)(1)(A), (c)(1)(B), and (c)(1)(C) of this Section for control devices do not apply during a control device system malfunction.
  - D) The owner or operator must demonstrate compliance with the requirements of subsection (c)(2)(A) of this Section (i.e., planned routine maintenance of a control device, during which the control device does not meet the specifications of ~~subsection~~ subsections (c)(1)(A), (c)(1)(B), or (c)(1)(C) of this Section, as applicable, must not exceed 240 hours per year) by recording the information specified in Section 724.989(e)(1)(E).
  - E) The owner or operator must correct control device system malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of air pollutants.
  - F) The owner or operator must operate the closed-vent system so that gases, vapors, or fumes are not actively vented to the control device during periods of planned maintenance or control device system malfunction (i.e., periods when the control device is not operating or not operating normally), except in cases when it is necessary to vent the gases, vapors, or fumes to avoid an unsafe condition or to implement malfunction corrective actions or planned maintenance actions.
  
- 3) The owner or operator using a carbon adsorption system to comply with subsection (c)(1) of this Section must operate and maintain the control device in accordance with the following requirements:

- 14308  
 14309  
 14310  
 14311  
 14312  
 14313  
 14314  
 14315  
 14316  
 14317  
 14318  
 14319  
 14320  
 14321  
 14322  
 14323  
 14324  
 14325  
 14326  
 14327  
 14328  
 14329  
 14330  
 14331  
 14332  
 14333  
 14334  
 14335  
 14336  
 14337  
 14338  
 14339  
 14340  
 14341  
 14342  
 14343  
 14344  
 14345  
 14346  
 14347  
 14348  
 14349  
 14350
- A) Following the initial startup of the control device, all activated carbon in the control device must be replaced with fresh carbon on a regular basis in accordance with the requirements of Section 724.933(g) or Section 724.933(h).
  - B) All carbon that is a hazardous waste and that is removed from the control device must be managed in accordance with the requirements of Section 724.933(n), regardless of the average volatile organic concentration of the carbon.
- 4) An owner or operator using a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system to comply with subsection (c)(1) ~~of this Section~~ must operate and maintain the control device in accordance with the requirements of Section 724.933(j).
- 5) The owner or operator must demonstrate that a control device achieves the performance requirements of subsection (c)(1) ~~of this Section~~, as follows:
- A) An owner or operator must demonstrate using either a performance test, as specified in subsection (c)(5)(C) ~~of this Section~~, or a design analysis, as specified in subsection (c)(5)(D) ~~of this Section~~, the performance of each control device, except for the following:
    - i) A flare;
    - ii) A boiler or process heater with a design heat input capacity of 44 megawatts or greater;
    - iii) A boiler or process heater into which the vent stream is introduced with the primary fuel;
    - iv) A boiler or industrial furnace burning hazardous waste for which the owner or operator has been issued a final permit under 35 Ill. Adm. Code 702, 703, and 705 and has designed and operates the unit in accordance with the interim status requirements of Subpart H of 35 Ill. Adm. Code 726; or
    - v) A boiler or industrial furnace burning hazardous waste that the owner or operator has designed and operates in accordance with the interim status requirements of Subpart

14351  
 14352  
 14353  
 14354  
 14355  
 14356  
 14357  
 14358  
 14359  
 14360  
 14361  
 14362  
 14363  
 14364  
 14365  
 14366  
 14367  
 14368  
 14369  
 14370  
 14371  
 14372  
 14373  
 14374  
 14375  
 14376  
 14377  
 14378  
 14379  
 14380  
 14381  
 14382  
 14383  
 14384  
 14385  
 14386  
 14387  
 14388  
 14389  
 14390  
 14391  
 14392  
 14393

H of 35 Ill. Adm. Code 726.

- B) An owner or operator must demonstrate the performance of each flare in accordance with the requirements specified in Section 724.933(e).
  - C) For a performance test conducted to meet the requirements of subsection (c)(5)(A) ~~of this Section~~, the owner or operator must use the test methods and procedures specified in Section 724.934(c)(1) through (c)(4).
  - D) For a design analysis conducted to meet the requirements of subsection (c)(5)(A) ~~of this Section~~, the design analysis must meet the requirements specified in Section 724.935(b)(4)(C).
  - E) The owner or operator must demonstrate that a carbon adsorption system achieves the performance requirements of subsection (c)(1) ~~of this Section~~ based on the total quantity of organics vented to the atmosphere from all carbon adsorption system equipment that is used for organic adsorption, organic desorption or carbon regeneration, organic recovery, and carbon disposal.
- 6) If the owner or operator and the Agency do not agree on a demonstration of control device performance using a design analysis then the disagreement must be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of subsection (c)(5)(C) ~~of this Section~~. The Agency may choose to have an authorized representative observe the performance test.
  - 7) The closed-vent system and control device must be inspected and monitored by the owner or operator in accordance with the procedures specified in Section 724.933(f)(2) and (l). The readings from each monitoring device required by Section 724.933(f)(2) must be inspected at least once each operating day to check control device operation. Any necessary corrective measures must be immediately implemented to ensure the control device is operated in compliance with the requirements of this Section.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.988 Inspection and Monitoring Requirements**

- a) The owner or operator must inspect and monitor air emission control equipment

14394 used to comply with this Subpart CC in accordance with the applicable  
 14395 requirements specified in Section 724.984 through Section 724.987.  
 14396

- 14397 b) The owner or operator must develop and implement a written plan and schedule  
 14398 to perform the inspections and monitoring required by subsection (a) of this  
 14399 Section. The owner or operator must incorporate this plan and schedule into the  
 14400 facility inspection plan required under 35 Ill. Adm. Code 724.115.  
 14401

14402 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
 14403

14404 **Section 724.989 Recordkeeping Requirements**  
 14405

- 14406 a) Each owner or operator of a facility subject to the requirements of this Subpart  
 14407 CC must record and maintain the information specified in subsections (b) through  
 14408 (j) of this Section, as applicable to the facility. Except for air emission control  
 14409 equipment design documentation and information required by subsections (i) and  
 14410 (j) of this Section, records required by this Section must be maintained in the  
 14411 operating record for a minimum of three years. Air emission control equipment  
 14412 design documentation must be maintained in the operating record until the air  
 14413 emission control equipment is replaced or is otherwise no longer in service.  
 14414 Information required by subsections (i) and (j) of this Section must be maintained  
 14415 in the operating record for as long as the waste management unit is not using air  
 14416 emission controls specified in Sections 724.984 through 724.987, in accordance  
 14417 with the conditions specified in Section 724.980(d) or (b)(7), respectively.  
 14418

- 14419 b) The owner or operator of a tank using air emission controls in accordance with the  
 14420 requirements of Section 724.984 must prepare and maintain records for the tank  
 14421 that include the following information:  
 14422

- 14423 1) For each tank using air emission controls in accordance with the  
 14424 requirements of Section 724.984, the owner or operator must record the  
 14425 following:  
 14426

14427 A) A tank identification number (or other unique identification  
 14428 description, as selected by the owner or operator).  
 14429

14430 B) A record for each inspection required by Section 724.984 that  
 14431 includes the following information:  
 14432

14433 i) Date inspection was conducted.  
 14434

14435 ii) For each defect detected during the inspection: the location  
 14436 of the defect, a description of the defect, the date of

14437  
14438  
14439  
14440  
14441  
14442  
14443  
14444  
14445  
14446  
14447  
14448  
14449  
14450  
14451  
14452  
14453  
14454  
14455  
14456  
14457  
14458  
14459  
14460  
14461  
14462  
14463  
14464  
14465  
14466  
14467  
14468  
14469  
14470  
14471  
14472  
14473  
14474  
14475  
14476  
14477  
14478  
14479

detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the requirements of Section 724.984, the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected.

- 2) In addition to the information required by subsection (b)(1) ~~of this Section~~, the owner or operator must record the following information, as applicable to the tank:
- A) The owner or operator using a fixed roof to comply with the Tank Level 1 control requirements specified in Section 724.984(c) must prepare and maintain records for each determination for the maximum organic vapor pressure of the hazardous waste in the tank performed in accordance with the requirements of Section 724.984(c). The records must include the date and time the samples were collected, the analysis method used, and the analysis results.
  - B) The owner or operator using an internal floating roof to comply with the Tank Level 2 control requirements specified in Section 724.984(e) must prepare and maintain documentation describing the floating roof design.
  - C) Owners and operators using an external floating roof to comply with the Tank Level 2 control requirements specified in Section 724.984(f) must prepare and maintain the following records:
    - i) Documentation describing the floating roof design and the dimensions of the tank.
    - ii) Records for each seal gap inspection required by Section 724.984(f)(3) describing the results of the seal gap measurements. The records must include the date that the measurements were performed, the raw data obtained for the measurements, and the calculations of the total gap surface area. In the event that the seal gap measurements do not conform to the specifications in Section 724.984(f)(1), the records must include a description of the repairs that were made, the date the repairs were made, and the date the tank was emptied, if necessary.

- 14480  
14481  
14482  
14483  
14484  
14485  
14486  
14487  
14488  
14489  
14490  
14491  
14492  
14493  
14494  
14495  
14496  
14497  
14498  
14499  
14500  
14501  
14502  
14503  
14504  
14505  
14506  
14507  
14508  
14509  
14510  
14511  
14512  
14513  
14514  
14515  
14516  
14517  
14518  
14519  
14520  
14521  
14522
- D) Each owner or operator using an enclosure to comply with the Tank Level 2 control requirements specified in Section 724.984(i) must prepare and maintain the following records:
    - i) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
    - ii) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) of this Section.
  - c) The owner or operator of a surface impoundment using air emission controls in accordance with the requirements of Section 724.985 must prepare and maintain records for the surface impoundment that include the following information:
    - 1) A surface impoundment identification number (or other unique identification description as selected by the owner or operator).
    - 2) Documentation describing the floating membrane cover or cover design, as applicable to the surface impoundment, that includes information prepared by the owner or operator or provided by the cover manufacturer or vendor describing the cover design, and certification by the owner or operator that the cover meets the specifications listed in Section 724.985(c).
    - 3) A record for each inspection required by Section 724.985 that includes the following information:
      - A) Date inspection was conducted.
      - B) For each defect detected during the inspection the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of Section 724.985(f), the owner or operator must also record the reason for the delay and the date that completion of repair of the defect is expected.

14523  
14524  
14525  
14526  
14527  
14528  
14529  
14530  
14531  
14532  
14533  
14534  
14535  
14536  
14537  
14538  
14539  
14540  
14541  
14542  
14543  
14544  
14545  
14546  
14547  
14548  
14549  
14550  
14551  
14552  
14553  
14554  
14555  
14556  
14557  
14558  
14559  
14560  
14561  
14562  
14563  
14564  
14565

- 4) For a surface impoundment equipped with a cover and vented through a closed-vent system to a control device, the owner or operator must prepare and maintain the records specified in subsection (e) ~~of this Section~~.
- d) The owner or operator of containers using Container Level 3 air emission controls in accordance with the requirements of Section 724.986 must prepare and maintain records that include the following information:
  - 1) Records for the most recent set of calculations and measurements performed by the owner or operator to verify that the enclosure meets the criteria of a permanent total enclosure as specified in "Procedure T – Criteria for and Verification of a Permanent or Temporary Total Enclosure" under appendix B to 40 CFR 52.741 (VOM Measurement Techniques for Capture Efficiency), incorporated by reference in 35 Ill. Adm. Code 720.111(b).
  - 2) Records required for the closed-vent system and control device in accordance with the requirements of subsection (e) ~~of this Section~~.
- e) The owner or operator using a closed-vent system and control device in accordance with the requirements of Section 724.987 must prepare and maintain records that include the following information:
  - 1) Documentation for the closed-vent system and control device that includes the following:
    - A) Certification that is signed and dated by the owner or operator stating that the control device is designed to operate at the performance level documented by a design analysis as specified in subsection (e)(1)(B) ~~of this Section~~ or by performance tests as specified in subsection (e)(1)(C) ~~of this Section~~ when the tank, surface impoundment, or container is or would be operating at capacity or the highest level reasonably expected to occur.
    - B) If a design analysis is used, then design documentation, as specified in Section 724.935(b)(4). The documentation must include information prepared by the owner or operator or provided by the control device manufacturer or vendor that describes the control device design in accordance with Section 724.935(b)(4)(C) and certification by the owner or operator that the control equipment meets the applicable specifications.

- 14566  
14567  
14568  
14569  
14570  
14571  
14572  
14573  
14574  
14575  
14576  
14577  
14578  
14579  
14580  
14581  
14582  
14583  
14584  
14585  
14586  
14587  
14588  
14589  
14590  
14591  
14592  
14593  
14594  
14595  
14596  
14597  
14598  
14599  
14600  
14601  
14602  
14603  
14604  
14605  
14606  
14607  
14608
- C) If performance tests are used, then a performance test plan as specified in Section 724.935(b)(3) and all test results.
  - D) Information as required by Section 724.935(c)(1) and Section 724.935(c)(2), as applicable.
  - E) An owner or operator must record, on a semiannual basis, the information specified in subsections (e)(1)(E)(i) and (e)(1)(E)(ii) ~~of this Section~~ for those planned routine maintenance operations that would require the control device not to meet the requirements of Section 724.987(c)(1)(A), (c)(1)(B), or (c)(1)(C) ~~of this Section~~, as applicable.
    - i) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next six-month period. This description must include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.
    - ii) A description of the planned routine maintenance that was performed for the control device during the previous six-month period. This description must include the type of maintenance performed and the total number of hours during those six months that the control device did not meet the requirements of Section 724.987(c)(1)(A), (c)(1)(B), or (c)(1)(C), as applicable, due to planned routine maintenance.
  - F) An owner or operator must record the information specified in subsections (e)(1)(F)(i) through (e)(1)(F)(iii) ~~of this Section~~ for those unexpected control device system malfunctions that would require the control device not to meet the requirements of Section 724.987 (c)(1)(A), (c)(1)(B), or (c)(1)(C) ~~of this Section~~, as applicable.
    - i) The occurrence and duration of each malfunction of the control device system.
    - ii) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.

- 14609  
14610  
14611  
14612  
14613  
14614  
14615  
14616  
14617  
14618  
14619  
14620  
14621  
14622  
14623  
14624  
14625  
14626  
14627  
14628  
14629  
14630  
14631  
14632  
14633  
14634  
14635  
14636  
14637  
14638  
14639  
14640  
14641  
14642  
14643  
14644  
14645  
14646  
14647  
14648  
14649  
14650  
14651
- iii) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.
  - G) Records of the management of carbon removed from a carbon adsorption system conducted in accordance with Section 724.987(c)(3)(B).
  - f) The owner or operator of a tank, surface impoundment, or container exempted from standards in accordance with the provisions of Section 724.982(c) must prepare and maintain the following records, as applicable:
    - 1) For tanks, surface impoundments, or containers exempted under the hazardous waste organic concentration conditions specified in Section 724.982(c)(1) or (c)(2)(A) through (c)(2)(F), the owner or operator must record the information used for each waste determination (e.g., test results, measurements, calculations, and other documentation) in the facility operating log. If analysis results for waste samples are used for the waste determination, then the owner or operator must record the date, time, and location that each waste sample is collected in accordance with the applicable requirements of Section 724.983.
    - 2) For tanks, surface impoundments, or containers exempted under the provisions of Section 724.982(c)(2)(G) or (c)(2)(H), the owner or operator must record the identification number for the incinerator, boiler, or industrial furnace in which the hazardous waste is treated.
  - g) An owner or operator designating a cover as "unsafe to inspect and monitor" pursuant to Section 724.984(l) or Section 724.985(g) must record in a log that is kept in the facility operating record the following information: the identification numbers for waste management units with covers that are designated as "unsafe to inspect and monitor"; the explanation for each cover stating why the cover is unsafe to inspect and monitor, and the plan and schedule for inspecting and monitoring each cover.
  - h) The owner or operator of a facility that is subject to this Subpart CC and to the control device standards in federal subpart VV of 40 CFR 60 (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry) or subpart V of 40 CFR 61 (National Emission Standard for Equipment Leaks (Fugitive Emission Sources)), each incorporated by reference in 35 Ill. Adm. Code 720.111(b), may elect to demonstrate compliance with the applicable Sections of this Subpart CC by documentation either pursuant

14652 to this Subpart CC, or pursuant to the provisions of subpart VV of 40 CFR 60 or  
 14653 subpart V of 40 CFR 61, to the extent that the documentation required by 40 CFR  
 14654 60 or 61 duplicates the documentation required by this Section.  
 14655

- 14656 i) For each tank or container not using air emission controls specified in Sections  
 14657 724.984 through 724.987 in accordance with the conditions specified in Section  
 14658 724.980(d), the owner or operator must record and maintain the following  
 14659 information:  
 14660
- 14661 1) A list of the individual organic peroxide compounds manufactured at the  
 14662 facility that meet the conditions specified in Section 724.980(d)(1).  
 14663
  - 14664 2) A description of how the hazardous waste containing the organic peroxide  
 14665 compounds identified pursuant to subsection (i)(1) of this Section are  
 14666 managed at the facility in tanks and containers. This description must  
 14667 include the following information:  
 14668
    - 14669 A) For the tanks used at the facility to manage this hazardous waste,  
 14670 sufficient information must be provided to describe the following  
 14671 for each tank: a facility identification number for the tank, the  
 14672 purpose and placement of this tank in the management train of this  
 14673 hazardous waste, and the procedures used to ultimately dispose of  
 14674 the hazardous waste managed in the tanks.  
 14675
    - 14676 B) For containers used at the facility to manage this hazardous waste,  
 14677 sufficient information must be provided to describe each container:  
 14678 a facility identification number for the container or group of  
 14679 containers, the purpose and placement of this container or group of  
 14680 containers in the management train of this hazardous waste, and  
 14681 the procedures used to ultimately dispose of the hazardous waste  
 14682 managed in the containers.  
 14683
  - 14684 3) An explanation of why managing the hazardous waste containing the  
 14685 organic peroxide compounds identified pursuant to subsection (i)(1) of  
 14686 ~~this Section~~ in the tanks or containers identified pursuant to subsection  
 14687 (i)(2) of ~~this Section~~ would create an undue safety hazard if the air  
 14688 emission controls specified in Sections 724.984 through 724.987 were  
 14689 installed and operated on these waste management units. This explanation  
 14690 must include the following information:  
 14691
    - 14692 A) For tanks used at the facility to manage this hazardous waste,  
 14693 sufficient information must be provided to explain the following:  
 14694 how use of the required air emission controls on the tanks would

14695 affect the tank design features and facility operating procedures  
14696 currently used to prevent an undue safety hazard during  
14697 management of this hazardous waste in the tanks; and why  
14698 installation of safety devices on the required air emission controls,  
14699 as allowed under this Subpart CC, would not address those  
14700 situations in which evacuation of tanks equipped with these air  
14701 emission controls is necessary and consistent with good  
14702 engineering and safety practices for handling organic peroxides.  
14703

14704 B) For containers used at the facility to manage this hazardous waste,  
14705 sufficient information must be provided to explain the following:  
14706 how use of the required air emission controls on the containers  
14707 would affect the container design features and handling procedures  
14708 currently used to prevent an undue safety hazard during  
14709 management of this hazardous waste in the containers; and why  
14710 installation of safety devices on the required air emission controls,  
14711 as allowed under this Subpart CC, would not address those  
14712 situations in which evacuation of containers equipped with these  
14713 air emission controls is necessary and consistent with good  
14714 engineering and safety practices for handling organic peroxides.  
14715

14716 j) For each hazardous waste management unit not using air emission controls  
14717 specified in Sections 724.984 through 724.987 in accordance with the  
14718 requirements of Section 724.980(b)(7), the owner and operator must record and  
14719 maintain the following information:  
14720

14721 1) The certification that the waste management unit is equipped with and  
14722 operating air emission controls in accordance with the requirements of an  
14723 applicable federal Clean Air Act regulation codified under 40 CFR 60, 61,  
14724 or 63.

14725  
14726 2) An identification of the specific federal requirements codified under 40  
14727 CFR 60, 61, or 63 with which the waste management unit is in  
14728 compliance.  
14729

14730 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
14731

14732 **Section 724.990 Reporting Requirements**  
14733

14734 a) Each owner or operator managing hazardous waste in a tank, surface  
14735 impoundment, or container exempted from using air emission controls under the  
14736 provisions of Section 724.982(c) must report to the Agency each occurrence when  
14737 hazardous waste is placed in the waste management unit in noncompliance with

- 14738 the conditions specified in Section 724.982(c)(1) or (c)(2), as applicable.  
 14739 Examples of such occurrences include placing in the waste management unit a  
 14740 hazardous waste having an average VO concentration equal to or greater than 500  
 14741 ppmw at the point of waste origination or placing in the waste management unit a  
 14742 treated hazardous waste that fails to meet the applicable conditions specified in  
 14743 Section 724.982(c)(2)(A) through (c)(2)(F). The owner or operator must submit a  
 14744 written report within 15 calendar days of the time that the owner or operator  
 14745 becomes aware of the occurrence. The written report must contain the USEPA  
 14746 identification number, the facility name and address, a description of the  
 14747 noncompliance event and the cause, the dates of the noncompliance, and the  
 14748 actions taken to correct the noncompliance and prevent recurrence of the  
 14749 noncompliance. The report must be signed and dated by an authorized  
 14750 representative of the owner or operator.  
 14751
- 14752 b) Each owner or operator using air emission controls on a tank in accordance with  
 14753 the requirements of Section 724.984(c) must report to the Agency each  
 14754 occurrence when hazardous waste is managed in the tank in noncompliance with  
 14755 the conditions specified in Section 724.984(b). The owner or operator must  
 14756 submit a written report within 15 calendar days of the time that the owner or  
 14757 operator becomes aware of the occurrence. The written report must contain the  
 14758 USEPA identification number, the facility name and address, a description of the  
 14759 noncompliance event and the cause, the dates of the noncompliance, and the  
 14760 actions taken to correct the noncompliance and prevent recurrence of the  
 14761 noncompliance. The report must be signed and dated by an authorized  
 14762 representative of the owner or operator.  
 14763
- 14764 c) Each owner or operator using a control device in accordance with the  
 14765 requirements of Section 724.987 must submit a semiannual written report to the  
 14766 Agency, except as provided for in subsection (d) of this Section. The report must  
 14767 describe each occurrence during the previous six-month period when either of the  
 14768 two following events occurs: a control device is operated continuously for 24  
 14769 hours or longer in noncompliance with the applicable operating values defined in  
 14770 Section 724.935(c)(4) or a flare is operated with visible emissions for five  
 14771 minutes or longer in a two-hour period, as defined in Section 724.933(d). The  
 14772 written report must include the USEPA identification number, the facility name  
 14773 and address, and an explanation why the control device could not be returned to  
 14774 compliance within 24 hours, and actions taken to correct the noncompliance. The  
 14775 report must be signed and dated by an authorized representative of the owner or  
 14776 operator.  
 14777
- 14778 d) A report to the Agency in accordance with the requirements of subsection (c) of  
 14779 this Section is not required for a six-month period during which all control  
 14780 devices subject to this Subpart CC are operated by the owner or operator so that

14781 both of the following conditions result: during no period of 24 hours or longer  
14782 did a control device operate continuously in noncompliance with the applicable  
14783 operating values defined in Section 724.935(c)(4) and no flare was operated with  
14784 visible emissions for five minutes or longer in a two-hour period, as defined in  
14785 Section 724.933(d).  
14786

14787 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
14788

14789 **SUBPART DD: CONTAINMENT BUILDINGS**  
14790

14791 **Section 724.1101 Design and Operating Standards**  
14792

- 14793 a) All containment buildings must comply with the following design and operating  
14794 standards:  
14795
- 14796 1) The containment building must be completely enclosed with a floor, walls,  
14797 and a roof to prevent exposure to the elements (e.g., precipitation, wind,  
14798 run on) and to assure containment of managed wastes.  
14799
  - 14800 2) The floor and containment walls of the unit, including the secondary  
14801 containment system if required under subsection (b), must be designed and  
14802 constructed of materials of sufficient strength and thickness to support  
14803 themselves, the waste contents, and any personnel and heavy equipment  
14804 that operate within the unit, and to prevent failure due to pressure  
14805 gradients, settlement, compression, or uplift, physical contact with the  
14806 hazardous wastes to which they are exposed; climatic conditions; and the  
14807 stresses of daily operation, including the movement of heavy equipment  
14808 within the unit and contact of such equipment with containment walls.  
14809 The unit must be designed so that it has sufficient structural strength to  
14810 prevent collapse or other failure. All surfaces to be in contact with  
14811 hazardous wastes must be chemically compatible with those wastes. The  
14812 containment building must meet the structural integrity requirements  
14813 established by professional organizations generally recognized by the  
14814 industry such as the American Concrete Institute (ACI) and the American  
14815 Society of Testing Materials (ASTM). If appropriate to the nature of the  
14816 waste management operation to take place in the unit, an exception to the  
14817 structural strength requirement may be made for light-weight doors and  
14818 windows that meet the following criteria:  
14819
- 14820 A) They provide an effective barrier against fugitive dust emissions  
14821 under subsection (c)(1)(C); and  
14822
  - 14823 B) The unit is designed and operated in a fashion that assures that

14824 wastes will not actually come in contact with these openings.

14825  
14826 3) Incompatible hazardous wastes or treatment reagents must not be placed in  
14827 the unit or its secondary containment system if they could cause the unit or  
14828 secondary containment system to leak, corrode, or otherwise fail.

14829  
14830 4) A containment building must have a primary barrier designed to withstand  
14831 the movement of personnel, waste, and handling equipment in the unit  
14832 during the operating life of the unit and appropriate for the physical and  
14833 chemical characteristics of the waste to be managed.

14834  
14835 b) For a containment building used to manage hazardous wastes containing free  
14836 liquids or treated with free liquids (the presence of which is determined by the  
14837 paint filter test, a visual examination, or other appropriate means), the owner or  
14838 operator must include the following:

14839  
14840 1) A primary barrier designed and constructed of materials to prevent the  
14841 migration of hazardous constituents into the barrier (e.g., a geomembrane  
14842 covered by a concrete wear surface).

14843  
14844 2) A liquid collection and removal system to minimize the accumulation of  
14845 liquid on the primary barrier of the containment building, as follows:

14846  
14847 A) The primary barrier must be sloped to drain liquids to the  
14848 associated collection system; and

14849  
14850 B) Liquids and waste must be collected and removed to minimize  
14851 hydraulic head on the containment system at the earliest  
14852 practicable time.

14853  
14854 3) A secondary containment system including a secondary barrier designed  
14855 and constructed to prevent migration of hazardous constituents into the  
14856 barrier, and a leak detection system that is capable of detecting failure of  
14857 the primary barrier and collecting accumulated hazardous wastes and  
14858 liquids at the earliest practicable time.

14859  
14860 A) The requirements of the leak detection component of the secondary  
14861 containment system are satisfied by installation of a system that is,  
14862 at a minimum, as follows:

14863  
14864 i) It is constructed with a bottom slope of 1 percent or more;  
14865 and  
14866

- 14867  
14868  
14869  
14870  
14871  
14872  
14873  
14874  
14875  
14876  
14877  
14878  
14879  
14880  
14881  
14882  
14883  
14884  
14885  
14886  
14887  
14888  
14889  
14890  
14891  
14892  
14893  
14894  
14895  
14896  
14897  
14898  
14899  
14900  
14901  
14902  
14903  
14904  
14905  
14906  
14907  
14908  
14909
- ii) It is constructed of a granular drainage material with a hydraulic conductivity of  $1 \times 10^{-2}$  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  $3 \times 10^{-5}$  m<sup>2</sup>/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(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) This subsection (b)(4) corresponds with 40 CFR 264.1101(b)(4), which is now obsolete and without effect. This statement maintains structural consistency with the federal rules. ~~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 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~~

14910                    C)    Fulfilled the terms of the revised plans, if such plans are approved  
14911                               by USEPA.  
14912

14913                    c)    An owner or operator of a containment building must do the following:  
14914

14915                    1)    It must use controls and practice to ensure containment of the hazardous  
14916                               waste within the unit, and at a minimum:

14917                               A)    Maintain the primary barrier to be free of significant cracks, gaps,  
14918                                          corrosion, or other deterioration that could cause hazardous waste  
14919                                          to be release from the primary barrier;  
14920

14921                               B)    Maintain the level of the stored or treated hazardous waste within  
14922                                          the containment walls of the unit so that the height of any  
14923                                          containment wall is not exceeded;  
14924

14925                               C)    Take measures to prevent the tracking of hazardous waste out of  
14926                                          the unit by personnel or by equipment used in handling the waste.  
14927                                          An area must be designated to decontaminate equipment and any  
14928                                          rinsate must be collected and properly managed; and  
14929

14930                               D)    Take measures to control fugitive dust emissions such that any  
14931                                          openings (doors, windows, vents, cracks, etc.) exhibit no visible  
14932                                          emissions (see Reference Method 22 (Visual Determination of  
14933                                          Fugitive Emissions from Material Sources and Smoke Emissions  
14934                                          from Flares) in appendix A to 40 CFR 60 (Test Methods)),  
14935                                          incorporated by reference in 35 Ill. Adm. Code 720.111(b). In  
14936                                          addition, all associated particulate collection devices (e.g., fabric  
14937                                          filter, electrostatic precipitator, etc.) must be operated and  
14938                                          maintained with sound air pollution control practices (see 40 CFR  
14939                                          60 for guidance). This state of no visible emissions must be  
14940                                          maintained effectively at all times during routine operating and  
14941                                          maintenance conditions, including when vehicles and personnel are  
14942                                          entering and exiting the unit.  
14943

14944  
14945                               BOARD NOTE: At 40 CFR 264.1101(c)(1)(iv) (2005), USEPA  
14946                                          cites "40 CFR part 60, subpart 292:." At 57 Fed. Reg. 37217 (Aug.  
14947                                          18, 1992), USEPA repeats this citation in the preamble discussion  
14948                                          of adoption of the rules. No such provision exists in the Code of  
14949                                          Federal Regulations. While 40 CFR 60.292 of the federal  
14950                                          regulations pertains to control of fugitive dust emissions, that  
14951                                          provision is limited in its application to glass melting furnaces.  
14952                                          The Board has chosen to use the general citation: "40 CFR 60:."

- 14953  
14954  
14955  
14956  
14957  
14958  
14959  
14960  
14961  
14962  
14963  
14964  
14965  
14966  
14967  
14968  
14969  
14970  
14971  
14972  
14973  
14974  
14975  
14976  
14977  
14978  
14979  
14980  
14981  
14982  
14983  
14984  
14985  
14986  
14987  
14988  
14989  
14990  
14991  
14992  
14993  
14994  
14995
- 2) It must obtain and keep on site a certification by a qualified Professional Engineer that the containment building design meets the requirements of subsections (a) through (c).
  - 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 accordance with the following procedures:
    - A) Upon detection of a condition that has 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).

14996  
14997  
14998  
14999  
15000  
15001  
15002  
15003  
15004  
15005  
15006  
15007  
15008  
15009  
15010  
15011  
15012  
15013  
15014  
15015  
15016  
15017  
15018  
15019  
15020  
15021  
15022  
15023  
15024  
15025  
15026  
15027  
15028  
15029  
15030  
15031  
15032  
15033  
15034  
15035  
15036  
15037  
15038

4) It must inspect and record in the facility's operating record, at least once every seven days, data gathered from monitoring 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.

d) For a containment building that contains both areas 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);
- 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, 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 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 requirements, and where containment of managed wastes and liquids can be assured without a secondary containment system.

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 724.1102 Closure and Post-Closure Care**

- a) At closure of a containment building, the owner or operator must remove or decontaminate all waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate and manage them as hazardous waste, unless 35 Ill. Adm. Code 721.103(e) applies. The closure plan, closure activities, cost estimates for closure, and financial responsibility for containment buildings must meet all of the requirements specified in Subparts G and H of this Part.
- b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components,

15039 subsoils, structures, and equipment as required in subsection (a), the owner or  
15040 operator finds that not all contaminated subsoils can be practicably removed or  
15041 decontaminated, he must close the facility and perform post-closure care in  
15042 accordance with the closure and post-closure requirements that apply to landfills  
15043 (Section 724.410). In addition, for the purposes of closure, post-closure, and  
15044 financial responsibility, such a containment building is then considered to be a  
15045 landfill, and the owner or operator must meet all the requirements for landfills  
15046 specified in Subparts G and H of this Part.

15047  
15048 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
15049

15050 SUBPART EE: HAZARDOUS WASTE MUNITIONS AND EXPLOSIVES STORAGE

15051  
15052 **Section 724.1201 Design and Operating Standards**

- 15053
- 15054 a) An owner or operator of a hazardous waste munitions and explosives storage unit  
15055 must design and operate the unit with containment systems, controls, and  
15056 monitoring that fulfill each of the following requirements:  
15057
- 15058 1) The owner or operator minimizes the potential for detonation or other  
15059 means of release of hazardous waste, hazardous constituents, hazardous  
15060 decomposition products, or contaminated run-off to the soil, groundwater ,  
15061 surface water, and atmosphere;  
15062
  - 15063 2) The owner or operator provides a primary barrier, which may be a  
15064 container (including a shell) or tank, designed to contain the hazardous  
15065 waste;  
15066
  - 15067 3) For wastes stored outdoors, the owner or operator provides that the waste  
15068 and containers will not be in standing precipitation;  
15069
  - 15070 4) For liquid wastes, the owner or operator provides a secondary containment  
15071 system that assures that any released liquids are contained and promptly  
15072 detected and removed from the waste area or a vapor detection system that  
15073 assures that any released liquids or vapors are promptly detected and an  
15074 appropriate response taken (e.g., additional containment, such as  
15075 overpacking or removal from the waste area); and  
15076
  - 15077 5) The owner or operator provides monitoring and inspection procedures that  
15078 assure the controls and containment systems are working as designed and  
15079 that releases that may adversely impact human health or the environment  
15080 are not escaping from the unit.  
15081

- 15082  
15083  
15084  
15085  
15086  
15087  
15088  
15089  
15090  
15091  
15092  
15093  
15094  
15095  
15096  
15097  
15098  
15099  
15100  
15101  
15102  
15103  
15104  
15105  
15106  
15107  
15108  
15109  
15110  
15111  
15112  
15113  
15114  
15115  
15116  
15117  
15118  
15119  
15120  
15121  
15122  
15123  
15124
- b) Hazardous waste munitions and explosives stored under this Subpart EE may be stored in one of the following:
    - 1) Earth-covered magazines. The owner or operator of an earth-covered magazine must fulfill each of the following requirements:
      - A) The magazine is constructed of waterproofed, reinforced concrete or structural steel arches, with steel doors that are kept closed when not being accessed;
      - B) The magazine is so designed and constructed that it fulfills each of the following requirements:
        - i) The magazine is of sufficient strength and thickness to support the weight of any explosives or munitions stored and any equipment used in the unit;
        - ii) The magazine provides working space for personnel and equipment in the unit; and
        - iii) The magazine can withstand movement activities that occur in the unit; and
      - C) The magazine is located and designed, with walls and earthen covers that direct an explosion in the unit in a safe direction, so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.
    - 2) Above-ground magazines. Above-ground magazines must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.
    - 3) Outdoor or open storage areas. Outdoor or open storage areas must be located and designed so as to minimize the propagation of an explosion to adjacent units and to minimize other effects of any explosion.
  - c) An owner or operator must store hazardous waste munitions and explosives in accordance with a standard operating procedure that specifies procedures that ensure safety, security, and environmental protection. If these procedures serve the same purpose as the security and inspection requirements of Section 724.114, the preparedness and prevention procedures of Subpart C of this Part, and the contingency plan and emergency procedures requirements of Subpart D of this Part, then the standard operating procedure may be used to fulfill those

15125 requirements.

- 15126
- 15127 d) An owner or operator must package hazardous waste munitions and explosives to
- 15128 ensure safety in handling and storage.
- 15129
- 15130 e) An owner or operator must inventory hazardous waste munitions and explosives
- 15131 at least annually.
- 15132
- 15133 f) An owner or operator must inspect and monitor hazardous waste munitions and
- 15134 explosives and their storage units as necessary to ensure explosives safety and to
- 15135 ensure that there is no migration of contaminants out of the unit.
- 15136

15137 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

15138

15139 **Section 724.1202 Closure and Post-Closure Care**

15140

- 15141 a) At closure of a magazine or unit that stored hazardous waste under this Subpart
- 15142 EE, the owner or operator must remove or decontaminate all waste residues,
- 15143 contaminated containment system components, contaminated subsoils, and
- 15144 structures and equipment contaminated with waste and manage them as hazardous
- 15145 waste unless 35 Ill. Adm. Code 721.103(d) applies. The closure plan, closure
- 15146 activities, cost estimates for closure, and financial responsibility for magazines or
- 15147 units must meet all of the requirements specified in Subparts G and H of this Part,
- 15148 except that the owner or operator may defer closure of the unit as long as it
- 15149 remains in service as a munitions or explosives magazine or storage unit.
- 15150
- 15151 b) If, after removing or decontaminating all residues and making all reasonable
- 15152 efforts to effect removal or decontamination of contaminated components,
- 15153 subsoils, structures, and equipment as required in subsection (a) of this Section,
- 15154 the owner or operator finds that not all contaminated subsoils can be practicably
- 15155 removed or decontaminated, the owner or operator must close the facility and
- 15156 perform post-closure care in accordance with the closure and post-closure
- 15157 requirements that apply to landfills (see Section 724.410).
- 15158

15159 (Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

15160

15161 **Section 724.APPENDIX I Groundwater Monitoring List**

- 15162
- 15163 a) Common names are those widely used in government regulations, scientific
- 15164 publications and commerce; synonyms exist for many chemicals.
- 15165
- 15166 b) "CAS RN" means "Chemical Abstracts Service Registry Number-". Where
- 15167 "total" is entered, all species in the groundwater that contain this element are
- 15168 included.
- 15169
- 15170 c) CAS index names are those used in the 9th Cumulative index.
- 15171
- 15172 d) PCBs (CAS RN 1336-36-3). This category contains congener chemicals,
- 15173 including constituents Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS
- 15174 RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN
- 15175 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN
- 15176 11097-69-1) and Aroclor-1260 (CAS RN 11096-82-5).
- 15177
- 15178 e) PCDDs. This category includes congener chemicals, including
- 15179 tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-
- 15180 dioxins and hexachlorodibenzo-p-dioxins.
- 15181
- 15182 f) PCDFs. This category contains congener chemicals, including
- 15183 tetrachlorodibenzofurans, pentachlorodibenzofurans, and
- 15184 hexachlorodibenzofurans.
- 15185

Common Name	CAS RN	Chemical Abstracts Service Index Name
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-
Acenaphthylene	208-96-8	Acenaphthylene
Acetone	67-64-1	2-Propanone
Acetophenone	98-86-2	Ethanone, 1-phenyl-
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile
2-Acetylaminofluorene; 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-
Acrolein	107-02-8	2-Propenal
Acrylonitrile	107-13-1	2-Propenenitrile
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro- (1 $\alpha$ ,4 $\alpha$ ,4a $\beta$ ,5 $\alpha$ ,8 $\alpha$ ,8a $\beta$ )-
Allyl chloride	107-05-1	1-Propene, 3-chloro-
4-Aminobiphenyl	92-67-1	(1,1'-Biphenyl)-4-amine
Aniline	62-53-3	Benzenamine
Anthracene	120-12-7	Anthracene

Antimony	(Total)	Antimony
Aramite	140-57-8	Sulfurous acid, 2-chloroethyl 2-(4-(1,1-dimethylethyl)phenoxy)-1-methylethyl ester
Arsenic	(Total)	Arsenic
Barium	(Total)	Barium
Benzene	71-43-2	Benzene
Benzo(a)anthracene;	56-55-3	Benz(a)anthracene
Benzanthracene		
Benzo(b)fluoranthene	205-99-2	Benz(e)acephenanthrylene
Benzo(k)fluoranthene	207-08-9	Benzo(k)fluoranthene
Benzo(ghi)perylene	191-24-2	Benzo(ghi)perylene
Benzo(a)pyrene	50-32-8	Benzo(a)pyrene
Benzyl alcohol	100-51-6	Benzenemethanol
Beryllium	(Total)	Beryllium
$\alpha$ -BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,5 $\beta$ ,6 $\beta$ )-
$\beta$ -BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\beta$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ )-
$\delta$ -BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\alpha$ ,3 $\alpha$ ,4 $\beta$ ,5 $\alpha$ ,6 $\beta$ )-
$\gamma$ -BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-, (1 $\alpha$ ,2 $\alpha$ ,3 $\beta$ ,4 $\alpha$ ,5 $\alpha$ ,6 $\beta$ )-
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1'-(methylenebis(oxy))bis(2-chloro-
Bis(2-chloroethyl) ether	111-44-4	Ethane, 1,1'-oxybis(2-chloro-
Bis(2-chloro-1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether	108-60-1	Propane, 2,2'-oxybis(1-chloro-
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester
Bromodichloromethane	75-27-4	Methane, bromodichloro-
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester
Cadmium	Total	Cadmium
Carbon disulfide	75-15-0	Carbon disulfide
Carbon tetrachloride	56-23-5	Methane, tetrachloro-
Chlordane	57-74-9	4,7-Methano-1H-indene,1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-
p-Chloroaniline	106-47-8	Benzeneamine, 4-chloro-

Chlorobenzene	108-90-7	Benzene, chloro-
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro- $\alpha$ -(4-chlorophenyl)- $\alpha$ -hydroxy-, ethyl ester
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-
Chloroform	67-66-3	Methane, trichloro-
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-
2-Chlorophenol	95-57-8	Phenol, 2-chloro-
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-
Chromium	(Total)	Chromium
Chrysene	218-01-9	Chrysene
Cobalt	(Total)	Cobalt
Copper	(Total)	Copper
m-Cresol	108-39-4	Phenol, 3-methyl-
o-Cresol	95-48-7	Phenol, 2-methyl-
p-Cresol	106-44-5	Phenol, 4-methyl-
Cyanide	57-12-5	Cyanide
2,4-D; 2,4-Dichlorophenoxyacetic acid	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-
4,4'-DDD	72-54-8	Benzene, 1,1'-(2,2-dichloroethylidene)bis(4-chloro-
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethylidene)bis(4-chloro-
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester
Dibenz(a,h)anthracene	53-70-3	Dibenz(a,h)anthracene
Dibenzofuran	132-64-9	Dibenzofuran
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-
1,2-Dibromo-3-chloropropane; DBCP	96-12-8	Propane, 1,2-dibromo-3-chloro-
1,2-Dibromoethane; Ethylene dibromide	106-93-4	Ethane, 1,2-dibromo-
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-

3,3'-Dichlorobenzidine	91-94-1	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dichloro-
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-
1,2-Dichloroethane; Ethylene dichloride	107-06-2	Ethane, 1,2-dichloro-
1,1-Dichloroethylene; Vinylidene chloride	75-35-4	Ethene, 1,1-dichloro-
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-, (E)-
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-
1,2-Dichloropropane	78-87-5	Propane, 1,2-dichloro-
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-
Dieldrin	60-57-1	(1aR,2R,2aS,3S,6R,6aR,7,7S,7aS)-rel-3,4,5,6,9,9-Hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-2,7:3,6-dimethanonaphth(2,3-b)oxirene2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1a $\alpha$ ,2 $\beta$ ,2a $\alpha$ ,3 $\beta$ ,6 $\beta$ ,6a $\alpha$ ,7 $\beta$ ,7a $\alpha$ )-
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin Dimethoate	297-97-2 60-51-5	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester Phosphorodithioic acid, O,O-dimethyl S-(2-(methylamino)-2-oxoethyl) ester
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-
7,12-Dimethylbenz(a)anthracene	57-97-6	Benz(a)anthracene,7,12-dimethyl-
3,3'-Dimethylbenzidine	119-93-7	(1,1'-Biphenyl)-4,4'-diamine, 3,3'-dimethyl-
$\alpha,\alpha$ -Dimethylphenethylamine	122-09-8	Benzeneethanamine, $\alpha,\alpha$ -dimethyl-
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-

2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester
1,4-Dioxane	123-91-1	1,4-Dioxane
Diphenylamine	122-39-4	Benzeneamine, N-phenyl-
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-(2-(ethylthio)ethyl) ester
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3 $\alpha$ ,5 $\alpha$ $\beta$ ,6 $\alpha$ ,9 $\alpha$ ,9 $\alpha$ $\beta$ )-
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3 $\alpha$ ,5 $\alpha$ $\alpha$ ,6 $\beta$ ,9 $\beta$ ,9 $\alpha$ )-
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin,6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3,3-dioxide
Endrin	72-20-8	2,7:3,6-Dimethanonaphth(2,3-b)oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1 $\alpha$ ,2 $\beta$ ,2 $\alpha$ $\beta$ ,3 $\alpha$ ,6 $\alpha$ ,6 $\alpha$ $\beta$ ,7 $\beta$ ,7 $\alpha$ )-
Endrin aldehyde	7421-93-4	1,2,4-Methanocyclopenta(cd)pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1 $\alpha$ ,2 $\beta$ ,2 $\alpha$ $\beta$ ,4 $\beta$ ,4 $\alpha$ $\beta$ ,5 $\beta$ ,6 $\alpha$ $\beta$ ,6 $\beta$ $\beta$ ,7R)-
Ethylbenzene	100-41-4	Benzene, ethyl-
Ethyl methacrylate	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester
Famphur	52-85-7	Phosphorothioic acid, O-(4-((dimethylamino)sulfonyl)phenyl)-O,O-dimethyl ester
Fluoranthene	206-44-0	Fluoranthene
Fluorene	86-73-7	9H-Fluorene

Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a- tetrahydro-
Heptachlor epoxide	1024-57-3	2,5-Methano-2H-indeno(1,2- b)oxirene, 2,3,4,5,6,7,7-heptachloro- 1a,1b,5,5a,6,6a-hexahydro-, (1 $\alpha$ ,1b $\beta$ ,2 $\alpha$ ,5 $\alpha$ ,5a $\beta$ ,6 $\beta$ ,6a $\alpha$ )-
Hexachlorobenzene	118-74-1	Benzene, hexachloro-
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4- hexachloro-
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5- hexachloro-
Hexachloroethane	67-72-1	Ethane, hexachloro-
Hexachlorophene	70-30-4	Phenol, 2,2'-methylenebis(3,4,6- trichloro-
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-
2-Hexanone	591-78-6	2-Hexanone
Indeno(1,2,3-cd)pyrene	193-39-5	Indeno(1,2,3-cd)pyrene
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro- (1 $\alpha$ ,4 $\alpha$ ,4a $\beta$ ,5 $\beta$ ,8 $\beta$ ,8a $\beta$ )-
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5- trimethyl-
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta- (c,d)pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6- decachlorooctahydro-
Lead	(Total)	Lead
Mercury	(Total)	Mercury
Methacrylonitrile	126-96-7	2-Propenenitrile, 2-methyl-
Methapyrilene	91-80-5	1,2-Ethanediamine, N,N-dimethyl- N'-2-pyridinyl-N'-(2-thienylmethyl)-
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2- trichloroethylidene)bis(4-methoxy-
Methyl bromide;	74-83-9	Methane, bromo-
Bromomethane		
Methyl chloride;	74-87-3	Methane, chloro-
Chloromethane		
3-Methylcholanthrene	56-49-5	Benz(j)aceanthrylene, 1,2-dihydro- 3-methyl-

Methylene bromide; Dibromomethane	74-95-3	Methane, dibromo-
Methylene chloride; Dichloromethane	75-09-2	Methane, dichloro-
Methyl ethyl ketone; MEK	78-93-3	2-Butanone
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester
2-Methylnaphthalene	91-57-6	Naphthylene, 2-methyl-
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester
4-Methyl-2-pentanone; Methyl isobutyl ketone	108-10-1	2-Pentanone, 4-methyl-
Naphthalene	91-20-3	Naphthalene
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione
1-Naphthylamine	134-32-7	1-Naphthalenamine
2-Naphthylamine	91-59-8	2-Naphthalenamine
Nickel	(Total)	Nickel
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-
Nitrobenzene	98-95-3	Benzene, nitro-
o-Nitrophenol	88-75-5	Phenol, 2-nitro-
p-Nitrophenol	100-02-7	Phenol, 4-nitro-
4-Nitroquinoline 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-
N-Nitrosodipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-
N-Nitrosomethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-
N-Nitrosomorpholine	59-89-2	Morpholine, 4-nitroso-
N-Nitrosopiperidene	100-75-4	Piperidene, 1-nitroso-
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester
Polychlorinated biphenyls; PCBs	See (g)	1,1'-Biphenyl, chloro derivatives
Polychlorinated dibenzo-p-dioxins; PCDDs	See (h)	Dibenzo(b,e)(1,4)dioxin, chloro derivatives

Polychlorinated dibenzofurans; PCDFs	See (i)	Bibenzofuran, chloro derivatives
Pentachlorobenzene	608-93-5	Benzene, pentachloro-
Pentachloroethane	76-01-7	Ethane, pentachloro-
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-
Pentachlorophenol	87-86-5	Phenol, pentachloro-
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)
Phenanthrene	85-01-8	Phenanthrene
Phenol	108-95-2	Phenol
p-Phenylenediamine	106-50-3	1,4-Benzenediamine
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S-((ethylthio)methyl) ester
2-Picoline	109-06-8	Pyridine, 2-methyl-
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propenyl)-
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile
Pyrene	129-00-0	Pyrene
Pyridine	110-86-1	Pyridine
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-
Selenium	(Total)	Selenium
Silver	(Total)	Silver
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-
Styrene	100-42-5	Benzene, ethenyl-
Sulfide	18496-25-8	Sulfide
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-8	Dibenzo(b,e)(1,4)dioxin, 2,3,7,8-tetrachloro-
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-
1,1,2,2,-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene	127-18-4	Ethene, tetrachloro-
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-
Tetraethyl dithiopyrophosphate; Sulfotepp	3689-24-5	Thiodiphosphoric acid (((HO) <sub>2</sub> P(S)) <sub>2</sub> O), tetraethyl ester
Thallium	(Total)	Thallium
Tin	(Total)	Tin
Toluene	108-88-3	Benzene, methyl-
o-Toluidine	95-53-4	Benzenamine, 2-methyl-
Toxaphene	8001-35-2	Toxaphene

1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-
1,1,1-Trichloroethane; Methyl chloroform	71-55-6	Ethane, 1,1,1-trichloro-
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-
Trichloroethylene;	79-01-6	Ethene, trichloro-
Trichloroethene		
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-
2,4,5-Trichlorophenol	95-96-4	Phenol, 2,4,5-trichloro-
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O- triethyl ester
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-
Vanadium	(Total)	Vanadium
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester
Vinyl chloride	75-01-4	Ethene, chloro-
Xylene (total)	1330-20-7	Benzene, dimethyl-
Zinc	(Total)	Zinc

15186

15187

(Source: Amended at 42 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)