POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

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

2) Code Citation: 35 Ill. Adm. Code 725

3)

Section Numbers:	Proposed Actions:
725.101	Amendment
725.171	Amendment
725.981	Amendment
725.984	Amendment

4) Statutory Authority: 415 ILCS 5/7.2, 22.4, and 27

5) A Complete Description of the Subjects and Issues Involved: The amendment to Part 725 are a single segment of consolidated docket R20-3/R20-11 rulemaking that also affects 35 Ill. Adm. Code 702, 705, 720 through 724, 726, 728, 733, 810, and 811. The consolidated R20-3/R20-11 rulemaking updates the Illinois hazardous waste rules to incorporate amendments adopted by the United States Environmental Protection Agency (USEPA) during 2019. A comprehensive description is contained in the Board's opinion and order of May 21, 2020, proposing amendments in consolidated docket R20-3/R20-11, which opinion and order is available from the address below.

The Notice of Proposed Amendments for 35 Ill. Adm. Code 702, which also appears in this issue of the *Illinois Register* summarizes the broader rulemaking that is consolidated docket R20-3/R20-11. The Board directs attention to that Notice for elaboration.

Specifically, the amendments to Part 725 incorporate segments of USEPA's Hazardous Waste Pharmaceuticals Rule and Universal Waste Aerosol Cans Rule into the Illinois hazardous waste regulations. The amendments include needed corrections in rule not directly related to USEPA amendments, including a correction to prior amendments requested by the Joint Committee on Administrative Rules (JCAR).

Tables appear in a document entitled "Identical-in–Substance Rulemaking Addendum (Proposed)" that the Board added to consolidated docket R20-3/R20-11. 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 R20-3/R20-11.

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Sections 22.4 of the Environmental Protection Act [415 ILCS 5/22.4] provides that Section 5-35 of the 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 APA, it is not subject to First Notice or to Second Notice review by JCAR.

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 R20-3/R20-11 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 R20-3/R20-11:

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

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

312/814-6924
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 pcb.illinois.gov.

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) Small Business Impact Analysis: Sections 1-5(c) and 5-30 of the Administrative Procedure Act [5 ILCS 100/1-5(c) and 5-30] provide that small business impact analysis and related requirements under Section 5-30 do not apply to this type of identical-in-substance rulemaking.

15) Regulatory Agenda on which this rulemaking was summarized: January 2020

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

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

PART 725
INTERIM STATUS STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SUBPART A: GENERAL PROVISIONS

Section	
725.101	Purpose, Scope, and Applicability
725.102	Electronic Reporting
725.104	Imminent Hazard Action

SUBPART B: GENERAL FACILITY STANDARDS

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725.110	Applicability
725.111	USEPA Identification Number
725.112	Required Notices
725.113	General Waste Analysis
725.114	Security
725.115	General Inspection Requirements
725.116	Personnel Training
725.117	General Requirements for Ignitable, Reactive, or Incompatible Wastes
725.118	Location Standards
725.119	Construction Quality Assurance Program

SUBPART C: PREPAREDNESS AND PREVENTION

Section	
725.130	Applicability
725.131	Maintenance and Operation of Facility
725.132	Required Equipment
725.133	Testing and Maintenance of Equipment
725.134	Access to Communications or Alarm System
725.135	Required Aisle Space
725.137	Arrangements with Local Authorities

SUBPART D: CONTINGENCY PLAN AND EMERGENCY PROCEDURES

Section	
725.150	Applicability
725.151	Purpose and Implementation of Contingency Plan
725.152	Content of Contingency Plan
725.153	Copies of Contingency Plan
725.154	Amendment of Contingency Plan
725.155	Emergency Coordinator
725.156	Emergency Procedures

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

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725.170	Applicability
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725.172	Manifest Discrepancies
725.173	Operating Record
725.174	Availability, Retention, and Disposition of Records
725.175	Annual Report
725.176	Unmanifested Waste Report
725.177	Additional Reports

SUBPART F: GROUNDWATER MONITORING

Section	
725.190	Applicability
725.191	Groundwater Monitoring System
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SUBPART G: CLOSURE AND POST-CLOSURE CARE

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725.210	Applicability
725.211	Closure Performance Standard
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725.213	Closure; Time Allowed for Closure
725.214	Disposal or Decontamination of Equipment, Structures, and Soils
725.215	Certification of Closure
725.216	Survey Plat
725.217	Post-Closure Care and Use of Property
725.218	Post-Closure Care Plan; Amendment of Plan
725.219	Post-Closure Notices

725.220	Certification of Completion of Post-Closure Care
725.221	Alternative Post-Closure Care Requirements

SUBPART H: FINANCIAL REQUIREMENTS

Section	
725.240	Applicability
725.241	Definitions of Terms as Used in this Subpart H
725.242	Cost Estimate for Closure
725.243	Financial Assurance for Closure
725.244	Cost Estimate for Post-Closure Care
725.245	Financial Assurance for Post-Closure Monitoring and Maintenance
725.246	Use of a Mechanism for Financial Assurance of Both Closure and Post-Closure Care
725.247	Liability Requirements
725.248	Incapacity of Owners or Operators, Guarantors, or Financial Institutions
725.251	Promulgation of Forms (Repealed)

SUBPART I: USE AND MANAGEMENT OF CONTAINERS

Section	
725.270	Applicability
725.271	Condition of Containers
725.272	Compatibility of Waste with Containers
725.273	Management of Containers
725.274	Inspections
725.276	Special Requirements for Ignitable or Reactive Wastes
725.277	Special Requirements for Incompatible Wastes
725.278	Air Emission Standards

SUBPART J: TANK SYSTEMS

Section	
725.290	Applicability
725.291	Assessment of Existing Tank System Integrity
725.292	Design and Installation of New Tank Systems or Components
725.293	Containment and Detection of Releases
725.294	General Operating Requirements
725.295	Inspections
725.296	Response to Leaks or Spills and Disposition of Tank Systems
725.297	Closure and Post-Closure Care
725.298	Special Requirements for Ignitable or Reactive Wastes
725.299	Special Requirements for Incompatible Wastes

130	725.300	Waste Analysis and Trial Tests
131	725.301	Generators of 100 to 1,000 Kilograms of Hazardous Waste Per Month (Repealed)
132	725.302	Air Emission Standards
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134		SUBPART K: SURFACE IMPOUNDMENTS
135		
136	Section	
137	725.320	Applicability
138	725.321	Design and Operating Requirements
139	725.322	Action Leakage Rate
140	725.323	Containment System
141	725.324	Response Actions
142	725.325	Waste Analysis and Trial Tests
143	725.326	Monitoring and Inspections
144	725.328	Closure and Post-Closure Care
145	725.329	Special Requirements for Ignitable or Reactive Wastes
146	725.330	Special Requirements for Incompatible Wastes
147	725.331	Air Emission Standards
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149		SUBPART L: WASTE PILES
150		
151	Section	
152	725.350	Applicability
153	725.351	Protection from Wind
154	725.352	Waste Analysis
155	725.353	Containment
156	725.354	Design and Operating Requirements
157	725.355	Action Leakage Rates
158	725.356	Special Requirements for Ignitable or Reactive Wastes
159	725.357	Special Requirements for Incompatible Wastes
160	725.358	Closure and Post-Closure Care
161	725.359	Response Actions
162	725.360	Monitoring and Inspections
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164		SUBPART M: LAND TREATMENT
165		
166	Section	
167	725.370	Applicability
168	725.372	General Operating Requirements
169	725.373	Waste Analysis
170	725.376	Food Chain Crops
171	725.378	Unsaturated Zone (Zone of Aeration) Monitoring
172	725.379	Recordkeeping

725.380	Closure and Post-Closure Care
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725.400	Applicability
725.401	Design Requirements
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725.404	Monitoring and Inspections
725.409	Surveying and Recordkeeping
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725.412	Special Requirements for Ignitable or Reactive Wastes
725.413	Special Requirements for Incompatible Wastes
725.414	Special Requirements for Liquid Wastes
725.415	Special Requirements for Containers
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725.440	Applicability
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725.452	Interim Status Incinerators Burning Particular Hazardous Wastes

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725.470	Other Thermal Treatment
725.473	General Operating Requirements
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725.483	Interim Status Thermal Treatment Devices Burning Particular Hazardous Wastes

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725.500	Applicability
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Section	
725.930	Applicability
725.931	Definitions
725.932	Standards: Process Vents
725.933	Standards: Closed-Vent Systems and Control Devices
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SUBPART BB: AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS

Section	
725.950	Applicability
725.951	Definitions
725.952	Standards: Pumps in Light Liquid Service
725.953	Standards: Compressors
725.954	Standards: Pressure Relief Devices in Gas/Vapor Service

725.955	Standards: Sampling Connecting Systems
725.956	Standards: Open-Ended Valves or Lines
725.957	Standards: Valves in Gas/Vapor or Light Liquid Service
725.958	Standards: Pumps, Valves, Pressure Relief Devices, Flanges, and Other Connectors
725.959	Standards: Delay of Repair
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725.963	Test Methods and Procedures
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SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS

Section	
725.980	Applicability
725.981	Definitions
725.982	Schedule for Implementation of Air Emission Standards
725.983	Standards: General
725.984	Waste Determination Procedures
725.985	Standards: Tanks
725.986	Standards: Surface Impoundments
725.987	Standards: Containers
725.988	Standards: Closed-Vent Systems and Control Devices
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725.991	Alternative Tank Emission Control Requirements (Repealed)

SUBPART DD: CONTAINMENT BUILDINGS

Section	
725.1100	Applicability
725.1101	Design and Operating Standards
725.1102	Closure and Post-Closure Care

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725.1200	Applicability
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725.APPENDIX A Recordkeeping Instructions

725.APPENDIX B	EPA Report Form and Instructions (Repealed)
725.APPENDIX C	USEPA Interim Primary Drinking Water Standards
725.APPENDIX D	Tests for Significance
725.APPENDIX E	Examples of Potentially Incompatible Wastes
725.APPENDIX F	Compounds with Henry's Law Constant Less Than 0.1 Y/X (at 25°C)

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

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 14034, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11869, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1085, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14069, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6044, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13489, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19338, effective November 10, 1987; amended in R87-26 at 12 Ill. Reg. 2485, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13027, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 437, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18354, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14447, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16498, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9398, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14534, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9578, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17672, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5681, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20620, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6771, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12190, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17548, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9566, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11078, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 369, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7620, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17620, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1850, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9168, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1076, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9575, effective June 20, 2000; amended in R03-7 at 27 Ill. Reg. 4187, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6028, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6389, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 3460, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 1031, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. 12566, effective July 14, 2008; amended in R09-3 at 33 Ill. Reg. 1155, effective December 30, 2008; amended in R09-16/R10-4 at 34 Ill. Reg. 18890, effective November 12, 2010; amended in R11-2/R11-16 at 35 Ill. Reg. 18052, effective October 14, 2011; amended in R13-15 at 37 Ill. Reg. 17811, effective October 24, 2013; amended in R15-1 at 39 Ill. Reg. 1746, effective January 12, 2015; amended in R16-7 at 40 Ill. Reg. 11830,

effective August 9, 2016; amended in R17-14/R17-15/R18-12/R18-31 at 42 Ill. Reg. 23725, effective November 19, 2018; amended in R19-3 at 43 Ill. Reg. 634, effective December 6, 2018; amended in R19-11 at 43 Ill. Reg. 6049, effective May 2, 2019; amended in R20-3/R20-11 at 44 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 725.101 Purpose, Scope, and Applicability

a) The purpose of this Part is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure care requirements, until post-closure care responsibilities are fulfilled.

b) Except as provided in Section 725.980(b), the standards in this Part and 35 Ill. Adm. Code 724.652 through 724.654 apply to owners and operators of facilities that treat, store, or dispose of hazardous waste and which have fully complied with the requirements for interim status pursuant to Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) (42 USC 6925(e)) and 35 Ill. Adm. Code 703, until either a permit is issued pursuant to Section 3005 of the Resource Conservation and Recovery Act (42 USC 6905) or Section 21(f) of the Environmental Protection Act, or until applicable closure and post-closure care responsibilities pursuant to this Part are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 that have failed to provide timely notification as required by section 3010(a) of RCRA (42 USC 6930(a)) or that have failed to file Part A of the Permit Application, as required by federal 40 CFR 270.10(e) and (g) or 35 Ill. Adm. Code 703.150 and 703.152. These standards apply to all treatment, storage, or disposal of hazardous waste at these facilities, except as specifically provided otherwise in this Part or in 35 Ill. Adm. Code 721.

BOARD NOTE: As stated in Section 3005(a) of RCRA (42 USC 6905(a)), after the effective date of regulations pursuant to that Section (i.e., 40 CFR 270 and 124) the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA (42 USC 6905(e)) provides for the continued operation of an existing facility that meets certain conditions until final administrative disposition of the owner's and operator's permit application is made.

c) The requirements of this Part do not apply to any of the following:

1) 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.);

BOARD NOTE: This Part applies to the treatment or storage of hazardous waste before it is loaded into an ocean vessel for incineration or disposal at sea, as provided in subsection (b).

2) This subsection (c)(2) corresponds with 40 CFR 265.1(c)(2), marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules;

3) The owner or operator of a POTW (publicly owned treatment works) that treats, stores, or disposes of hazardous waste;

BOARD NOTE: The owner or operator of a facility pursuant to subsections (c)(1) and (c)(3) is subject to the requirements of 35 Ill. Adm. Code 724 to the extent they are included in a permit by rule granted to such a person pursuant to 35 Ill. Adm. Code 702 and 703 or are required by Subpart F of 35 Ill. Adm. Code 704.

4) This subsection (c)(4) corresponds with 40 CFR 265.1(c)(4), which pertains exclusively to the applicability of the federal regulations in authorized states. There is no need for a parallel provision in the Illinois regulations. This statement maintains structural consistency with USEPA rules;

5) The owner or operator of a facility permitted, licensed, or registered by Illinois to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation pursuant to this Part by 35 Ill. Adm. Code 722.114;

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

7) A generator accumulating waste on-site in compliance with applicable conditions for exemption in 35 Ill. Adm. Code 722.114 through 722.117 and Subparts K and L of 35 Ill. Adm. Code 722, except to the extent the requirements of this Part are included in those Sections and Subparts;

8) A farmer disposing of waste pesticides from the farmer's own use in compliance with 35 Ill. Adm. Code 722.170;

9) The owner or operator of a totally enclosed treatment facility, as defined in 35 Ill. Adm. Code 720.110;

10) The owner or operator of an elementary neutralization unit or a wastewater treatment unit, as defined in 35 Ill. Adm. Code 720.110, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in Table T of 35 Ill. Adm. Code 728) or reactive (D003) waste in order to remove the characteristic before land disposal, the owner or operator must comply with the requirements set forth in Section 725.117(b);

11) Immediate Response

A) Except as provided in subsection (c)(11)(B), 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 a 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.

C) Any person that is covered by subsection (c)(11)(A) 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;

12) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 35 Ill. Adm. Code 722.130 at a transfer facility for a period of ten days or less;

13) The addition of absorbent material to waste in a container (as defined in 35 Ill. Adm. Code 720.110) or the addition of waste to the absorbent material in a container, provided that these actions occur at the time that the waste is first placed in the containers and Sections 725.117(b), 725.271, and 725.272 are complied with;

14) 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;

D) Lamps, as described in 35 Ill. Adm. Code 733.105; and~~.~~

E) Aerosol cans, as described in 35 Ill. Adm. Code 733.106;

15) This subsection (c)(15) corresponds with 40 CFR 265.1(c)(15), which applies only to a facility outside Illinois. This statement maintains structural consistency with the corresponding USEPA rule;

16) A reverse distributor accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in 35 Ill. Adm. Code 726.600. A reverse distributor is subject to regulation under Subpart P of 35 Ill. Adm. Code 726 in lieu of this Part for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.

d) The following hazardous wastes must not be managed at facilities subject to regulation pursuant to this Part: USEPA hazardous waste numbers F020, F021, F022, F023, F026, or F027, unless the following conditions are fulfilled:

1) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

2) The waste is stored in tanks or containers;

3) The waste is stored or treated in waste piles that meet the requirements of 35 Ill. Adm. Code 724.350(c) and all other applicable requirements of Subpart L;

4) The waste is burned in incinerators that are certified pursuant to the standards and procedures in Section 725.452; or

5) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in Section 725.483.

e) 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, and the 35 Ill. Adm. Code 728 standards are considered material conditions or requirements of the interim status standards of this Part.

f) 35 Ill. Adm. Code 726.505 identifies when the requirements of this Part apply 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.

g) Other bodies of regulations may apply to a person, facility, or activity, such as 35 Ill. Adm. Code 809 (special waste hauling), 35 Ill. Adm. Code 807 or 810 through 817 (solid waste landfills), 35 Ill. Adm. Code 848 or 849 (used and scrap tires), or 35 Ill. Adm. Code 1420 through 1422 (potentially infectious medical waste), depending on the provisions of those other regulations.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

Section 725.171 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 35 Ill. Adm. Code 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) Paper manifest submission requirements are the following:

i) The owner, operator, or agent must send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest System for purposes of data entry and processing. In lieu of submitting the 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 and any continuation sheet, or both a data string file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days

after the date of delivery. Submissions of copies to the e-Manifest System must be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, USEPA will not accept mailed paper manifests from facilities for processing in the e-Manifest System; and

ii) Options for Compliance on June 30, 2021. Beginning on June 30, 2021, the requirement to submit the top copy (Page 1) of the paper manifest and any paper continuation sheet to the e-Manifest System for purposes of data entry and processing may be met by the owner or operator only by transmitting to the e-Manifest System an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the e-Manifest System both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days after~~of~~ the date of delivery. Submissions of copies to the e-Manifest System must~~shall~~ be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, USEPA will not accept mailed paper manifests from facilities for processing in the e-Manifest System; and

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

3) The owner or operator of a facility that receives hazardous waste subject to Subpart H of 35 Ill. Adm. Code 722 from a foreign source must:

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

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

b) If a facility receives from a rail or water (bulk shipment) transporter hazardous

waste that is accompanied by a shipping paper containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification, and signatures), the owner or operator or its agent must do each of the following:

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

2) It must note any significant discrepancies, as defined in Section 725.172(a), in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

BOARD NOTE: The owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis need not perform that analysis before signing the shipping paper and giving it to the transporter. Section 725.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

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

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

BOARD NOTE: 35 Ill. Adm. Code 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

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

c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722. The provisions of 35 Ill. Adm. Code 722.115, 722.116, and 722.117 apply to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of 35 Ill. Adm. Code 722.115, 722.116, and 722.117 only apply to an owner or operator that ships hazardous waste which it generated at that facility or operating as an LQG consolidating hazardous waste from VSQGs under 35 Ill.

Adm. Code 722.117(f).

d) As required by 40 CFR 262.84(d)(2)(O), within three working days after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the foreign exporter and to the competent authorities of the countries of export and transit that control the shipment as an export or transit of hazardous waste. On or after the electronic import-export reporting compliance date, to USEPA electronically using USEPA's WIETS. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on USEPA's WIETS, provided that copies are readily available for viewing and production if requested by any USEPA or authorized state inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with USEPA's WIETS, for which the owner or operator of a facility bears no responsibility.

e) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under its state hazardous waste program. A facility must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to that state.

f) Legal Equivalence to Paper Manifests. E-Manifests that are obtained, completed, transmitted in accordance with 35 Ill. Adm. Code 722.120(a)(3), and used in accordance with this Section in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in 35 Ill. Adm. Code 720 through 728 to obtain, complete, sign, provide, use, or retain a manifest.

1) Any requirement in 35 Ill. Adm. Code 720 through 728 for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 35 Ill. Adm. Code 722.125.

2) Any requirement in 35 Ill. Adm. Code 720 through 728 to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an e-Manifest is transmitted to the other person.

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

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

1) As prescribed in 40 CFR 265.1311, incorporated by reference in 35 Ill. Adm. Code 720.111, and determined in 40 CFR 265.1312, incorporated by reference in 35 Ill. Adm. Code 720.111, an owner or operator that is a user of the e-Manifest System must be assessed a user fee by USEPA for the submission and processing of each e-Manifest and paper manifest. USEPA has stated that it would update the schedule of user fees and publish them to the user community, as provided in 40 CFR 265.1313, incorporated by reference in 35 Ill. Adm. Code 720.111.

2) An owner or operator subject to user fees under this Section must make user fee payments in accordance with the requirements of 40 CFR 265.1314, incorporated by reference in 35 Ill. Adm. Code 720.111, subject to the informal fee dispute resolution process of 40 CFR 265.1316, incorporated by reference in 35 Ill. Adm. Code 720.111, and subject to the sanctions for delinquent payments under 40 CFR 265.1315, incorporated by reference in 35 Ill. Adm. Code 720.111.

k) E-Manifest Signatures. E-Manifest signatures must meet the criteria described in 35 Ill. Adm. Code 722.125.

l) Post-Receipt Manifest Data Corrections. After a facility has certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any interested person (i.e., any waste handler shown on the manifest or the Agency) may submit any post-receipt data corrections at any time.

1) An interested person must make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web-based service provided in the e-Manifest System for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.

2) Each correction submission must include the following information:

A) The Manifest Tracking Number and date of receipt by the facility of the original manifests for which data are being corrected;

B) The item numbers of the original manifest that is the subject of the submitted corrections; and

C) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.

3) Each correction submission must~~shall~~ include a statement that the person submitting the corrections certifies that, to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete:

A) The person must execute the certification statement with a valid electronic signature; and

B) The person may submit a batch upload of data corrections under one certification statement.

4) Upon receipt by the e-Manifest System of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.

5) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the e-Manifest System, certified by the respondent as specified in subsection (l)(3), and with notice of the corrections to other interested persons shown on the manifest.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

SUBPART CC: AIR EMISSION STANDARDS FOR TANKS, SURFACE

IMPOUNDMENTS, AND CONTAINERS

Section 725.981 Definitions

As used in this Subpart CC, all terms not defined in this Section~~Secton herein~~ will have the meanings given to them in section 1004 of RCRA, incorporated by reference in 35 Ill. Adm. Code 720.111, and 35 Ill. Adm. Code 720 through 728.

"Average volatile organic concentration" or "average VO concentration" means the mass-weighted average volatile organic concentration of a hazardous waste, as determined in accordance with the requirements of Section 725.984.

"Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover so that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

"Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

"Cover" means a device that provides a continuous barrier over the hazardous waste managed in a unit to prevent or reduce air emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, and gauge wells) that are necessary for operation, inspection, maintenance, or repair of the unit on which the cover is used. A cover may be a separate piece of equipment that can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

"Enclosure" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

"External floating roof" means a pontoon-type or double-deck type cover that rests on the surface of a hazardous waste being managed in a tank with no fixed roof.

"Fixed roof" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

"Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

"Floating roof" means a cover consisting of a double-deck, pontoon single-deck, or internal floating cover that rests upon and is supported by the material being contained, and is equipped with a continuous seal.

"Hard-piping" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

"In light material service" means that the container is used to manage a material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20 °C~~20° C~~ (1.2 inches H_2O at 68 °F~~68° F~~); and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C~~20° C~~ (1.2 inches H_2O at 68 °F~~68° F~~) is equal to or greater than 20 percent by weight.

"Internal floating roof" means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

"Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof, continuously around the circumference of the tank.

"Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure that is caused in part by poor maintenance or careless operation is not a malfunction.

"Maximum organic vapor pressure" means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining wastes, etc.) reasonably expected to occur in the tank. For the purpose of this Subpart CC, maximum organic vapor pressure is determined using the procedures specified in Section 725.984(c).

"Metallic shoe seal" means a continuous seal that is constructed of metal sheets that are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and which is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the

metal sheet and the floating roof.

"No detectable organic emissions" means no escape of organics to the atmosphere, as determined using the procedure specified in Section 725.984(d).

"Point of waste origination" means as follows:

When the facility owner or operator is the generator of the hazardous waste, the "point of waste origination" means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste, as defined in 35 Ill. Adm. Code 721.

BOARD NOTE: In this case, this term is being used in a manner similar to the use of the term "point of generation" in air standards established for waste management operations under authority of the federal Clean Air Act in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories).

When the facility owner and operator are not the generator of the hazardous waste, "point of waste origination" means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

"Point of waste treatment" means the point where a hazardous waste to be treated in accordance with Section 725.983(c)(2) exits the treatment process. Any waste determination must be made before the waste is conveyed, handled, or otherwise managed in a manner that allows the waste to volatilize to the atmosphere.

"Safety device" means a closure device, such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this Subpart CC, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on 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.

"Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

"Vapor-mounted seal" means a continuous seal that is mounted so that there is a vapor space between the hazardous waste in the unit and the bottom of the seal.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of organic compounds contained in a hazardous waste expressed in terms of parts per million (ppmw), as determined by direct measurement or by knowledge of the waste, in accordance with the requirements of Section 725.984. For the purpose of determining the VO concentration of a hazardous waste, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole- fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 °C (77 °F)~~25° C (77° F)~~ must be included. Appendix F presents a list of compounds known to have a Henry's law constant value less than the cutoff level.

"Waste determination" means performing all applicable procedures in accordance with the requirements of Section 725.984 to determine whether a hazardous waste meets standards specified in this Subpart CC. Examples of a waste determination include performing the procedures in accordance with the requirements of Section 725.984 to determine the average VO concentration of a hazardous waste at the point of waste origination, determining the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste, the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards, or determining the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

"Waste stabilization process" means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095B (Paint Filter Liquids Test) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA publication number EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). A waste stabilization process includes mixing the hazardous waste with binders or other materials and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to

this process are "waste fixation" or "waste solidification". This does not include the addition of absorbent materials to the surface of a waste to absorb free liquid without mixing, agitation, or subsequent curing.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

Section 725.984 Waste Determination Procedures

a) Determination of Volatile Organic (VO) Concentration 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 725.983(c)(1) from using air emission controls in accordance with standards specified in Section 725.985 through Section 725.988, 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 725.983(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 VO concentration limits specified in Section 725.983(c)(1).

2) For a waste determination that is required by subsection (a)(1), the average VO concentration of a hazardous waste at the point of waste origination must be determined using either direct measurement, as specified in subsection (a)(3), or by knowledge of the waste, as specified in subsection (a)(4).

3) Direct Measurement

A) Identification. The owner or operator must identify and record the point of waste origination for the hazardous waste.

B) Sampling. Samples of the hazardous waste stream must be collected at the point of waste origination in such a manner that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but must not exceed one year.

ii) A sufficient number of samples, but no fewer than four samples, must be collected for a hazardous waste determination. All of the samples for a given waste determination must be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste stream are collected so that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and

handling procedures in Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii), must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous waste represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with Reference Method 25D in appendix A to 40 CFR 60 for the total concentration of volatile organic constituents or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 °C (77 °F). At the owner's or operator's discretion, the owner or operator may adjust test data measured by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25 °C. If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 °C contained in the waste. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factor (f_{m25D}) approved in writing by the Agency. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) and provided the requirement is met to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 °C.

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63 (Alternative Validation Procedure for EPA Waste and Wastewater

Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b); or

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or 5.3, and the corresponding calculations in Section 6.1 or 6.3, of Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations

i) The average VO concentration ($\overline{C}$) on a mass-weighted basis must be calculated by using the results for all waste determinations conducted in accordance with subsections (a)(3)(B) and (a)(3)(C) and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

$\overline{C}$ = Average VO concentration of the hazardous waste at the point of waste origination on a mass-weighted basis, in ppmw;

i = Individual waste determination "i" of the hazardous waste

n = Total number of waste determinations of the hazardous waste conducted for the averaging period (not to exceed one year)

Q_i = Mass quantity of the hazardous waste stream represented by C_i, in kg/hr

Q_T = Total mass quantity of the hazardous waste during the averaging period, in kg/hr

C_i = Measured VO concentration of waste determination "i", as determined in accordance with subsection (a)(3)(C) (i.e., the average of

the four or more samples specified in subsection (a)(3)(B)(ii)), in ppmw

ii) For the purpose of determining C_i, for individual waste samples analyzed in accordance with subsection (a)(3)(C), the owner or operator must account for VO concentrations determined to be below the limit of detection of the analytical method by using the VO concentration determined according to subsection (a)(3)(G).

E) Provided that the test method is appropriate for the waste as required under subsection (a)(3)(C), the Agency must determine compliance based on the test method used by the owner or operator as recorded pursuant to Section 725.990(f)(1).

F) The quality assurance program elements required under subsections (a)(3)(C)(vi) and (a)(3)(C)(vii) are as follows:

i) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps.

ii) Measurement of the overall accuracy and precision of the specific procedures.

BOARD NOTE: Subsections (a)(3)(F)(i) and (a)(3)(F)(ii) are derived from 40 CFR 265.984(a)(3)(iii)(F)(1), (a)(3)(iii)(F)(2), (a)(3)(iii)(G)(1), and (a)(3)(iii)(G)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

G) VO concentrations below the limit of detection must be considered to be as follows:

i) If Reference Method 25D is used for the analysis, the VO concentration must be considered to be one-half the blank value determined in the method at Section 4.4 of Reference Method 25D.

ii) If any other analytical method is used, the VO concentration must be considered to be one-half the sum of the limits of detection established for each organic

constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 °C (77 °F).

BOARD NOTE: Subsections (a)(3)(G)(i) and (a)(3)(G)(ii) are derived from 40 CFR 265.984(a)(3)(iv)(A)(1) and (a)(3)(iv)(A)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

4) Use of Owner or Operator Knowledge

A) Documentation must be prepared that presents the information used as the basis for the owner's or operator's knowledge of the hazardous waste stream's average VO concentration. Examples of information that may be used as the basis for knowledge include the following: material balances for the source or process generating the hazardous waste stream; constituent-specific chemical test data for the hazardous waste stream from previous testing that are still applicable to the current waste stream; previous test data for other locations managing the same type of waste stream; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.

B) If test data are used as the basis for knowledge, then the owner or operator must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use organic concentration test data for the hazardous waste stream that are validated in accordance with Method 301 as the basis for knowledge of the waste.

C) An owner or operator using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous waste may adjust the test data to the corresponding average VO concentration value that would have been obtained had the waste samples been analyzed using Reference Method 25D. To adjust these data, the measured concentration for each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (f_{m25D}).

D) In the event that the Agency and the owner or operator disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement, as specified in subsection (a)(3), must be used to establish compliance with the applicable requirements of this Subpart CC. The Agency may perform or request that the owner or operator perform this determination using direct measurement. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of subsection (a)(3)(C).

b) Determination of VO Concentration at the Point of Waste Treatment

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 725.983(c)(2)(A) through (c)(2)(F) from using air emission controls in accordance with the standards specified in Sections 725.985 through 725.988, 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 treated waste stream is placed in the waste management unit exempt under Section 725.983(c)(2), (c)(3), or (c)(4) from using air emission controls. Thereafter, an owner or operator must update the information used for the waste determination at least once every 12 months following the date of the initial waste determination.

B) An owner or operator must perform a new waste determination whenever changes to the process generating or treating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to such a level that the applicable treatment conditions specified in Section 725.983(c)(2), (c)(3), or (c)(4) are not achieved.

2) The owner or operator must designate and record the specific provision in Section 725.983(c)(2) under which the waste determination is being performed. The waste determination for the treated hazardous waste must be performed using the applicable procedures specified in subsections (b)(3) through (b)(9).

3) Procedure for Determination of VO Concentration

A) Identification. The owner or operator must identify and record the point of waste treatment for the hazardous waste.

B) Sampling. Samples of the hazardous waste stream must be collected at the point of waste treatment in such a manner that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but must not exceed one year.

ii) A sufficient number of samples, but no fewer than four samples, must be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination must be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the hazardous waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the process generating or treating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste stream are collected so that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records.

An example of an acceptable sample collection and handling procedures for a total organic constituent concentration may be found in Reference Method 25D.

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii), must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the process treating the hazardous waste represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with Reference Method 25D for the total concentration of volatile organic constituents or using one or more methods when the individual organic compound concentrations are identified and summed, and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 °C (77° F). When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of 35 Ill. Adm. Code 724.982(c)(2)(A) through (c)(2)(F) or Section 725.983(c)(2)(A) through (c)(2)(F) are met, then the waste samples must be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. At the owner's or operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value less than 0.1 Y/X at 25 °C. If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 °C contained in the waste. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factor (f_{m25D}) approved in writing by the Agency. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) and provided the requirement is met to reflect all organic

compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8×10^{-6} atmospheres/gram-mole/m^3) at 25 °C.

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63, incorporated by reference in 35 Ill. Adm. Code 720.111(b); or

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or 5.3, and the corresponding calculations in Section 6.1 or 6.3, of Method 301 in appendix A to 40 CFR 63, incorporated by reference in 35 Ill. Adm. Code 720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations. The average VO concentration ($\overline{C}$) on a mass-weighted basis must be calculated by using the results for all samples analyzed in accordance with subsection (b)(3)(C) and the following equation:

$$\overline{C} = \frac{1}{Q_T} \times \sum_{i=1}^{n} (Q_i \times C_i)$$

Where:

$\overline{C}$ = Average VO concentration of the hazardous waste at the point of waste treatment on a mass-weighted basis, in ppmw

i = Individual determination "i" of the hazardous waste

n = Total number of waste determinations of the hazardous waste collected for the averaging period (not to exceed one year)

Q_i = Mass quantity of the hazardous waste stream represented by C_i, in kg/hr

Q_T = Total mass quantity of hazardous waste during the averaging period, in kg/hr

C_i = Measured VO concentration of waste determinations "i", as determined in accordance

with the requirements of subsection (b)(3)(C) (i.e., the average of the four or more samples specified in subsection (b)(3)(B)(ii)), in ppmw

E) Provided that the test method is appropriate for the waste as required under subsection (b)(3)(C), compliance must be determined based on the test method used by the owner or operator as recorded pursuant to Section 725.990(f)(1).

4) Procedure for Determination of Exit Concentration Limit (C_t)

A) The point of waste origination for each hazardous waste treated by the process at the same time must be identified.

B) If a single hazardous waste stream is identified in subsection (b)(4)(A), then the exit concentration limit (C_t) must be 500 ppmw.

C) If more than one hazardous waste stream is identified in subsection (b)(4)(A), then the average VO concentration of each hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a). The exit concentration limit (C_t) must be calculated by using the results determined for each individual hazardous waste stream and the following equation:

$$C_t = \frac{\sum_{x=1}^{m}\left(Q_x \times \overline{C}_x\right) + \sum_{y=1}^{n}\left(Q_y \times 500\,ppmw\right)}{\sum_{x=1}^{m} Q_x + \sum_{y=1}^{n} Q_y}$$

Where:

C_t = Exit concentration limit for treated hazardous waste, in ppmw

x = Individual hazardous waste stream "x" that has an average VO concentration less than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a)

y = Individual hazardous waste stream "y" that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a)

m = Total number of "x" hazardous waste streams treated by process

n = Total number of "y" hazardous waste streams treated by process

Q_x = Annual mass quantity of hazardous waste stream "x", in kg/yr

Q_y = Annual mass quantity of hazardous waste stream "y", in kg/yr

$\overline{C}_x$ = Average VO concentration of hazardous waste stream "x" at the point of waste origination, as determined in accordance with the requirements of subsection (a), in ppmw

5) Procedure for Determination of Organic Reduction Efficiency (R)

A) The organic reduction efficiency (R) for a treatment process must be determined based on results for a minimum of three consecutive runs.

B) All hazardous waste streams entering the process and all hazardous waste streams exiting the treatment process must be identified. The owner or operator must prepare a sampling plan for measuring these streams that accurately reflects the retention time of the hazardous waste in the process.

C) For each run, information must be determined for each hazardous waste stream identified in subsection (b)(5)(B), using the following procedures:

i) The mass quantity of each hazardous waste stream entering the process (Q_b) and the mass quantity of each hazardous waste stream exiting the process (Q_a) must be determined; and

ii) The average VO concentration at the point of waste origination of each hazardous waste stream entering the process (C_b) during the run must be determined in accordance with the requirements of subsection (a)(3). The average VO concentration at the point of waste treatment of each hazardous waste stream exiting the process (C_a) during the run must be determined in accordance with the requirements of subsection (b)(3).

D) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) must be calculated by using the results determined in accordance with subsection (b)(5)(C) and the following equations:

$$E_b = \frac{1}{10^6} \sum_{j=1}^{m} \left(Q_{bj} \times \overline{C_{bj}} \right)$$

$$E_a = \frac{1}{10^6} \sum_{j=1}^{m} \left(Q_{aj} \times \overline{C_{aj}} \right)$$

Where:

E_a = Waste volatile organic mass flow exiting the process, in kg/hr

E_b = Waste volatile organic mass flow entering the process, in kg/hr

m = Total number of runs (at least 3);

j = Individual run "j"

Q_{bj} = Mass quantity of hazardous waste entering the process during run "j", in kg/hr

Q_{aj} = Average mass quantity of waste exiting the process during run "j", in kg/hr

$\overline{C_{aj}}$ = Average VO concentration of hazardous waste exiting the process during run "j", as determined in accordance with the requirements of subsection (b)(3), in ppmw

$\overline{C_{bj}}$ = Average VO concentration of hazardous waste entering the process during run "j", as determined in accordance with the requirements of subsection (a)(3), in ppmw

E) The organic reduction efficiency of the process must be calculated by using the results determined in accordance with subsection (b)(5)(D) and the following equation:

$$R = \frac{E_b - E_a}{E_b} \times 100\%$$

Where:

R = Organic reduction efficiency, in percent

E_b = Waste volatile organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr

E_a = Waste volatile organic mass flow exiting the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr

6) Procedure for Determination of Organic Biodegradation Efficiency (R_{bio})

A) The fraction of organics biodegraded (F_{bio}) must be determined using the procedure specified in appendix C to 40 CFR 63 (Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

B) The organic biodegradation efficiency (R_{bio}) must be calculated by using the following equation:

$$R_{bio} = F_{bio} \times 100\%$$

Where:

R_{bio} = Organic biodegradation efficiency, in percent

F_{bio} = Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(6)(A)

7) Procedure for Determination of Required Organic Mass Removal Rate (RMR)

A) All of the hazardous waste streams entering the treatment process must be identified.

B) The average VO concentration of the hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a).

C) For each individual hazardous waste stream that has an average volatile organic concentration equal to or greater than 500 ppmw at the point of waste origination, the average volumetric flow rate of hazardous waste and the density of the hazardous waste stream at the point of waste origination must be determined.

D) The required organic mass removal rate (RMR) for the hazardous waste must be calculated by using the average VO concentration, average volumetric flow rate, and density determined for each individual hazardous waste stream, and the following equation:

$$RMR = \sum_{y=1}^{n} \left[V_y \times k_y \times \frac{\left(\overline{C}_y - 500 ppmw\right)}{10^6} \right]$$

Where:

RMR = Required organic mass removal rate, in kg/hr;
y = Individual hazardous waste stream "y" that has an average volatile organic (VO) concentration equal to or greater than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a)
n = Total number of "y" hazardous waste streams treated by process
V_y = Average volumetric flow rate of hazardous waste stream "y" at the point of waste origination, in m^3/hr
k_y = Density of hazardous waste stream "y", in kg/m^3
$\overline{C}_y$ = Average VO concentration of hazardous waste stream "y" at the point of waste origination, as determined in accordance with the requirements of subsection (a), in ppmw

8) Procedure for Determination of Actual Organic Mass Removal Rate (MR)

A) The actual organic mass removal rate (MR) must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste volatile organic mass flow entering the process (E_b) and the waste volatile organic mass flow exiting the process (E_a) must be determined in accordance with the requirements of subsection (b)(5)(D).

C) The actual organic mass removal rate (MR) must be calculated by using the mass flow rate determined in accordance with the requirements of subsection (b)(8)(B) and the following equation:

$$MR = E_b - E_a$$

Where:

MR = Actual organic mass removal rate, in kg/hr
E_b = Waste volatile organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr
E_a = Waste volatile organic mass flow exiting the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr

9) Procedure for Determination of Actual Organic Mass Biodegradation Rate (MR_{bio})

A) The actual organic mass biodegradation rate (MR_{bio}) must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste organic mass flow entering the process (E_b) must be determined in accordance with the requirements of subsection (b)(5)(D).

C) The fraction of organic biodegraded (F_{bio}) must be determined using the procedure specified in appendix C to 40 CFR 63 (Determination of the Fraction Biodegraded (F_{bio}) in a Biological Treatment Unit), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

D) The actual organic mass biodegradation rate (MR_{bio}) must be calculated by using the mass flow rates and fraction of organic biodegraded, as determined in accordance with the requirements of subsections (b)(9)(B) and (b)(9)(C), respectively, and the following equation:

$$MR_{bio} = E_b \times F_{bio}$$

Where:

MR_{bio} = Actual organic mass biodegradation rate, in kg/hr

E_b = Waste organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr

F_{bio} = Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(9)(C)

c) Procedure for Determination of VO in a Tank

1) An owner or operator must determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with standards specified in Section 725.985(c).

2) An owner or operator must use either direct measurement, as specified in subsection (c)(3), or knowledge of the waste, as specified by subsection (c)(4), to determine the maximum organic vapor pressure that is representative of the hazardous waste composition stored or treated in the tank.

3) Direct Measurement to Determine VO

A) Sampling. A sufficient number of samples must be collected to be representative of the waste contained in the tank. All samples must be conducted and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste are collected so that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures may be found in Reference Method 25D.

B) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous waste:

i) Reference Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

ii) Methods described in API publication 2517 (Evaporative Loss from External Floating-Roof Tanks), incorporated by reference in 35 Ill. Adm. Code 720.111(a);

iii) Methods obtained from standard reference texts;

iv) ASTM Method D 2879-92 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), incorporated by reference in 35 Ill. Adm. Code 720.111(a); or

v) Any other method approved by the Agency.

4) Use of Knowledge to Determine the Maximum Organic Vapor Pressure of the Hazardous Waste. Documentation must be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum organic vapor pressure of the hazardous waste is less than the maximum vapor pressure limit listed in Section 725.985(b)(1)(A) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

d) The procedure for determining no detectable organic emissions for the purpose of complying with this Subpart CC is as follows:

1) The test must be conducted in accordance with the procedures specified in Reference Method 21 (Determination of Volatile Organic Compound Leaks) of appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices must be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to, any of the following: the interface of the cover and its foundation mounting, the periphery of any opening on the cover and its associated closure device, and the sealing seat interface on a spring-loaded pressure relief valve.

2) The test must be performed when the unit contains a hazardous waste having an organic concentration representative of the range of

concentrations for the hazardous waste expected to be managed in the unit. During the test, the cover and closure devices must be secured in the closed position.

3) The detection instrument must meet the performance criteria of Reference Method 21, except the instrument response factor criteria in Section 3.1.2(a) of Reference Method 21 must be for the average composition of the organic constituents in the hazardous waste placed in the waste management unit, not for each individual organic constituent.

4) The detection instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

5) Calibration gases must be as follows:

A) Zero air (less than 10 ppmv hydrocarbon in air), and

B) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

6) The background level must be determined according to the procedures in Reference Method 21.

7) Each potential leak interface must be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Reference Method 21. If the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface must be sampled. If the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet must be placed at approximately the center of the exhaust area to the atmosphere.

8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison must be as specified in subsection (d)(9). If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration

indicated by the instrument and the background level must be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

AGENCY P vs ROT

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

PART 725
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AUTHORITY: Implementing Sections 7.2 and 22.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 22.4, and 27].

SOURCE: Adopted in R81-22 at 5 Ill. Reg. 9781, effective May 17, 1982; amended and codified in R81-22 at 6 Ill. Reg. 4828, effective May 17, 1982; amended in R82-18 at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19 at 7 Ill. Reg. 14034, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11869, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1085, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14069, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6044, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13489, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19338, effective November 10, 1987; amended in R87-26 at 12 Ill. Reg. 2485, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13027, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 437, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18354, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14447, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16498, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. 9398, effective June 17, 1991; amended in R91-1 at 15 Ill. Reg. 14534, effective October 1, 1991; amended in R91-13 at 16 Ill. Reg. 9578, effective June 9, 1992; amended in R92-1 at 16 Ill. Reg. 17672, effective November 6, 1992; amended in R92-10 at 17 Ill. Reg. 5681, effective March 26, 1993; amended in R93-4 at 17 Ill. Reg. 20620, effective November 22, 1993; amended in R93-16 at 18 Ill. Reg. 6771, effective April 26, 1994; amended in R94-7 at 18 Ill. Reg. 12190, effective July 29, 1994; amended in R94-17 at 18 Ill. Reg. 17548, effective November 23, 1994; amended in R95-6 at 19 Ill. Reg. 9566, effective June 27, 1995; amended in R95-20 at 20 Ill. Reg. 11078, effective August 1, 1996; amended in R96-10/R97-3/R97-5 at 22 Ill. Reg. 369, effective December 16, 1997; amended in R98-12 at 22 Ill. Reg. 7620, effective April 15, 1998; amended in R97-21/R98-3/R98-5 at 22 Ill. Reg. 17620, effective September 28, 1998; amended in R98-21/R99-2/R99-7 at 23 Ill. Reg. 1850, effective January 19, 1999; amended in R99-15 at 23 Ill. Reg. 9168, effective July 26, 1999; amended in R00-5 at 24 Ill. Reg. 1076, effective January 6, 2000; amended in R00-13 at 24 Ill. Reg. 9575, effective June 20, 2000; amended in R03-7 at 27 Ill. Reg. 4187, effective February 14, 2003; amended in R05-8 at 29 Ill. Reg. 6028, effective April 13, 2005; amended in R05-2 at 29 Ill. Reg. 6389, effective April 22, 2005; amended in R06-5/R06-6/R06-7 at 30 Ill. Reg. 3460, effective February 23, 2006; amended in R06-16/R06-17/R06-18 at 31 Ill. Reg. 1031, effective December 20, 2006; amended in R07-5/R07-14 at 32 Ill. Reg. 12566, effective July 14, 2008; amended in R09-3 at 33 Ill. Reg. 1155, effective December 30, 2008; amended in R09-16/R10-4 at 34 Ill. Reg. 18890, effective November 12, 2010; amended in R11-2/R11-16 at 35 Ill. Reg. 18052, effective October 14, 2011; amended in R13-15 at 37 Ill. Reg. 17811, effective October 24, 2013; amended in R15-1 at 39 Ill. Reg. 1746, effective January 12, 2015; amended in R16-7 at 40 Ill. Reg. 11830, effective August 9, 2016; amended in R17-14/R17-15/R18-12/R18-31

at 42 Ill. Reg. 23725, effective November 19, 2018; amended in R19-3 at 43 Ill. Reg. 634, effective December 6, 2018; amended in R19-11 at 43 Ill. Reg. 6049, effective May 2, 2019; amended in R20-3/R20-11 at 44 Ill. Reg. ____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 725.101 Purpose, Scope, and Applicability

a) The purpose of this Part is to establish minimum standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to post-closure care requirements, until post-closure care responsibilities are fulfilled.

b) Except as provided in Section 725.980(b), the standards in this Part and 35 Ill. Adm. Code 724.652 through 724.654 apply to owners and operators of facilities that treat, store, or dispose of hazardous waste and which have fully complied with the requirements for interim status pursuant to Section 3005(e) of the Resource Conservation and Recovery Act (RCRA) (42 USC 6925(e)) and 35 Ill. Adm. Code 703, until either a permit is issued pursuant to Section 3005 of the Resource Conservation and Recovery Act (42 USC 6905) or Section 21(f) of the Environmental Protection Act, or until applicable closure and post-closure care responsibilities pursuant to this Part are fulfilled, and to those owners and operators of facilities in existence on November 19, 1980 that have failed to provide timely notification as required by section 3010(a) of RCRA (42 USC 6930(a)) or that have failed to file Part A of the Permit Application, as required by federal 40 CFR 270.10(e) and (g) or 35 Ill. Adm. Code 703.150 and 703.152. These standards apply to all treatment, storage, or disposal of hazardous waste at these facilities, except as specifically provided otherwise in this Part or in 35 Ill. Adm. Code 721.

BOARD NOTE: As stated in Section 3005(a) of RCRA (42 USC 6905(a)), after the effective date of regulations pursuant to that Section (i.e., 40 CFR 270 and 124) the treatment, storage, or disposal of hazardous waste is prohibited except in accordance with a permit. Section 3005(e) of RCRA (42 USC 6905(e)) provides for the continued operation of an existing facility that meets certain conditions until final administrative disposition of the owner's and operator's permit application is made.

c) The requirements of this Part do not apply to any of the following:

1) 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.);

BOARD NOTE: This Part applies to the treatment or storage of hazardous waste before it is loaded into an ocean vessel for incineration or disposal at sea, as provided in subsection (b).

2) This subsection (c)(2) corresponds with 40 CFR 265.1(c)(2), marked "reserved" by USEPA. This statement maintains structural consistency with USEPA rules;

3) The owner or operator of a POTW (publicly owned treatment works) that treats, stores, or disposes of hazardous waste;

BOARD NOTE: The owner or operator of a facility pursuant to subsections (c)(1) and (c)(3) is subject to the requirements of 35 Ill. Adm. Code 724 to the extent they are included in a permit by rule granted to such a person pursuant to 35 Ill. Adm. Code 702 and 703 or are required by Subpart F of 35 Ill. Adm. Code 704.

4) This subsection (c)(4) corresponds with 40 CFR 265.1(c)(4), which pertains exclusively to the applicability of the federal regulations in authorized states. There is no need for a parallel provision in the Illinois regulations. This statement maintains structural consistency with USEPA rules;

5) The owner or operator of a facility permitted, licensed, or registered by Illinois to manage municipal or industrial solid waste, if the only hazardous waste the facility treats, stores, or disposes of is excluded from regulation pursuant to this Part by 35 Ill. Adm. Code 722.114;

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

7) A generator accumulating waste on-site in compliance with applicable conditions for exemption in 35 Ill. Adm. Code 722.114 through 722.117 and Subparts K and L of 35 Ill. Adm. Code 722, except to the extent the requirements of this Part are included in those Sections and Subparts;

8) A farmer disposing of waste pesticides from the farmer's own use in compliance with 35 Ill. Adm. Code 722.170;

9) The owner or operator of a totally enclosed treatment facility, as defined in 35 Ill. Adm. Code 720.110;

10) The owner or operator of an elementary neutralization unit or a wastewater treatment unit, as defined in 35 Ill. Adm. Code 720.110, provided that if the owner or operator is diluting hazardous ignitable (D001) wastes (other than the D001 High TOC Subcategory defined in Table T of 35 Ill. Adm. Code 728) or reactive (D003) waste in order to remove

the characteristic before land disposal, the owner or operator must comply with the requirements set forth in Section 725.117(b);

11) Immediate Response

A) Except as provided in subsection (c)(11)(B), 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 a 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.

C) Any person that is covered by subsection (c)(11)(A) 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;

12) A transporter storing manifested shipments of hazardous waste in containers meeting the requirements of 35 Ill. Adm. Code 722.130 at a transfer facility for a period of ten days or less;

13) The addition of absorbent material to waste in a container (as defined in 35 Ill. Adm. Code 720.110) or the addition of waste to the

absorbent material in a container, provided that these actions occur at the time that the waste is first placed in the containers and Sections 725.117(b), 725.271, and 725.272 are complied with;

14) 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;

D) Lamps, as described in 35 Ill. Adm. Code 733.105; and~~.~~

E) Aerosol cans, as described in 35 Ill. Adm. Code ~~733.106.~~733.106;

15) This subsection (c)(15) corresponds with 40 CFR 265.1(c)(15), which applies only to a facility outside Illinois. This statement maintains structural consistency with the corresponding USEPA rule~~.~~;

16) A reverse distributor accumulating potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals, as defined in 35 Ill. Adm. Code 726.600. A reverse distributor is subject to regulation under Subpart P of 35 Ill. Adm. Code 726 in lieu of this Part for the accumulation of potentially creditable hazardous waste pharmaceuticals and evaluated hazardous waste pharmaceuticals.

d) The following hazardous wastes must not be managed at facilities subject to regulation pursuant to this Part: USEPA hazardous waste numbers F020, F021, F022, F023, F026, or F027, unless the following conditions are fulfilled:

1) The wastewater treatment sludge is generated in a surface impoundment as part of the plant's wastewater treatment system;

2) The waste is stored in tanks or containers;

3) The waste is stored or treated in waste piles that meet the requirements of 35 Ill. Adm. Code 724.350(c) and all other applicable requirements of Subpart L;

4) The waste is burned in incinerators that are certified pursuant to the standards and procedures in Section 725.452; or

5) The waste is burned in facilities that thermally treat the waste in a device other than an incinerator and that are certified pursuant to the standards and procedures in Section 725.483.

e) 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, and the 35 Ill. Adm. Code 728 standards are considered material conditions or requirements of the interim status standards of this Part.

f) 35 Ill. Adm. Code 726.505 identifies when the requirements of this Part apply 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.

g) Other bodies of regulations may apply to a person, facility, or activity, such as 35 Ill. Adm. Code 809 (special waste hauling), 35 Ill. Adm. Code 807 or 810 through 817 (solid waste landfills), 35 Ill. Adm. Code 848 or 849 (used and scrap tires), or 35 Ill. Adm. Code 1420 through 1422 (potentially infectious medical waste), depending on the provisions of those other regulations.

(Source: Amended at 44 Ill. Reg. ____, effective _____)

SUBPART E: MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

Section 725.171 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 35 Ill. Adm. Code 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) Paper manifest submission requirements are the following:

i) The owner, operator, or agent must send the top copy (Page 1) of any paper manifest and any paper continuation sheet to the e-Manifest System for purposes of data entry and processing. In lieu of submitting the 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 and any continuation sheet, or both a data string file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days after the date of delivery. Submissions of copies to the e-Manifest System must be made at the mailing address or electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, USEPA will not accept mailed paper manifests from facilities for processing in the e-Manifest System; and

ii) Options for Compliance on June 30, 2021. Beginning on June 30, 2021, the requirement to submit the top copy (Page 1) of the paper manifest and any paper continuation sheet to the e-Manifest System for purposes of data entry and processing may be met by the owner or operator only by transmitting to the e-Manifest System an image file of Page 1 of the manifest and any continuation sheet, or by transmitting to the e-Manifest System both a data file and the image file corresponding to Page 1 of the manifest and any continuation sheet, within 30 days after ~~of~~ the date of delivery. Submissions of copies to the e-Manifest System must ~~shall~~ be made to the electronic mail/submission address specified at the e-Manifest program website's directory of services. Beginning on June 30, 2021, USEPA will not accept mailed paper manifests from facilities for processing in the e-Manifest System; and

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

3) The owner or operator of a facility that receives hazardous waste subject to Subpart H of 35 Ill. Adm. Code 722 from a foreign source must:

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

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

b) If a facility receives from a rail or water (bulk shipment) transporter hazardous waste that is accompanied by a shipping paper

containing all the information required on the manifest (excluding the USEPA identification numbers, generator certification, and signatures), the owner or operator or its agent must do each of the following:

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

2) It must note any significant discrepancies, as defined in Section 725.172(a), in the manifest or shipping paper (if the manifest has not been received) on each copy of the manifest or shipping paper;

BOARD NOTE: The owner or operator of a facility whose procedures under Section 725.113(c) include waste analysis need not perform that analysis before signing the shipping paper and giving it to the transporter. Section 725.172(b), however, requires reporting an unreconciled discrepancy discovered during later analysis.

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

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

BOARD NOTE: 35 Ill. Adm. Code 722.123(c) requires the generator to send three copies of the manifest to the facility when hazardous waste is sent by rail or water (bulk shipment).

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

c) Whenever a shipment of hazardous waste is initiated from a facility, the owner or operator of that facility must comply with the requirements of 35 Ill. Adm. Code 722. The provisions of 35 Ill. Adm. Code 722.115, 722.116, and 722.117 apply to the on-site accumulation of hazardous wastes by generators. Therefore, the provisions of 35 Ill. Adm. Code 722.115, 722.116, and 722.117 only apply to an owner or operator that ships hazardous waste which it generated at that facility or operating as an LQG consolidating hazardous waste from VSQGs under 35 Ill. Adm. Code 722.117(f).

d) As required by 40 CFR 262.84(d)(2)(O), within three working days after the receipt of a shipment subject to Subpart H of 35 Ill. Adm. Code 722, the owner or operator of a facility must provide a copy of the movement document bearing all required signatures to the foreign exporter and to the competent authorities of the countries of export and transit that control the shipment as an export or transit of hazardous waste. On or after the electronic import-export reporting compliance

date, to USEPA electronically using USEPA's WIETS. The original copy of the tracking document must be maintained at the facility for at least three years from the date of signature. The owner or operator of a facility may satisfy this recordkeeping requirement by retaining electronically submitted documents in the facility's account on USEPA's WIETS, provided that copies are readily available for viewing and production if requested by any USEPA or authorized state inspector. No owner or operator of a facility may be held liable for the inability to produce the documents for inspection under this section if the owner or operator of a facility can demonstrate that the inability to produce the document is due exclusively to technical difficulty with USEPA's WIETS, for which the owner or operator of a facility bears no responsibility.

e) A facility must determine whether the consignment state for a shipment regulates any additional wastes (beyond those regulated federally) as hazardous wastes under its state hazardous waste program. A facility must also determine whether the consignment state or generator state requires the facility to submit any copies of the manifest to that state.

f) Legal Equivalence to Paper Manifests. E-Manifests that are obtained, completed, transmitted in accordance with 35 Ill. Adm. Code 722.120(a)(3), and used in accordance with this Section in lieu of the paper manifest form are the legal equivalent of paper manifest forms bearing handwritten signatures, and satisfy for all purposes any requirement in 35 Ill. Adm. Code 720 through 728 to obtain, complete, sign, provide, use, or retain a manifest.

1) Any requirement in 35 Ill. Adm. Code 720 through 728 for the owner or operator of a facility to sign a manifest or manifest certification by hand, or to obtain a handwritten signature, is satisfied by signing with or obtaining a valid and enforceable electronic signature within the meaning of 35 Ill. Adm. Code 722.125.

2) Any requirement in 35 Ill. Adm. Code 720 through 728 to give, provide, send, forward, or to return to another person a copy of the manifest is satisfied when a copy of an e-Manifest is transmitted to the other person.

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

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

1) As prescribed in 40 CFR 265.1311, incorporated by reference in 35 Ill. Adm. Code 720.111, and determined in 40 CFR 265.1312, incorporated by reference in 35 Ill. Adm. Code 720.111, an owner or operator that is a user of the e-Manifest System must be assessed a user fee by USEPA for the submission and processing of each e-Manifest and paper manifest. USEPA has stated that it would update the schedule of user fees and publish them to the user community, as provided in 40 CFR 265.1313, incorporated by reference in 35 Ill. Adm. Code 720.111.

2) An owner or operator subject to user fees under this Section must make user fee payments in accordance with the requirements of 40 CFR 265.1314, incorporated by reference in 35 Ill. Adm. Code 720.111, subject to the informal fee dispute resolution process of 40 CFR 265.1316, incorporated by reference in 35 Ill. Adm. Code 720.111, and subject to the sanctions for delinquent payments under 40 CFR 265.1315, incorporated by reference in 35 Ill. Adm. Code 720.111.

k) E-Manifest Signatures. E-Manifest signatures must meet the criteria described in 35 Ill. Adm. Code 722.125.

l) Post-Receipt Manifest Data Corrections. After a facility has certified to the receipt of hazardous wastes by signing Item 20 of the manifest, any interested person (i.e., any waste handler shown on the manifest or the Agency) may submit any post-receipt data corrections at any time.

1) An interested person must make all corrections to manifest data by electronic submission, either by directly entering corrected data to the web-based service provided in the e-Manifest System for such corrections, or by an upload of a data file containing data corrections relating to one or more previously submitted manifests.

2) Each correction submission must include the following information:

A) The Manifest Tracking Number and date of receipt by the facility of the original manifests for which data are being corrected;

B) The item numbers of the original manifest that is the subject of the submitted corrections; and

C) For each item number with corrected data, the data previously entered and the corresponding data as corrected by the correction submission.

3) Each correction submission must ~~shall~~ include a statement that the person submitting the corrections certifies that, to the best of his or her knowledge or belief, the corrections that are included in the submission will cause the information reported about the previously received hazardous wastes to be true, accurate, and complete:

A) The person must execute the certification statement with a valid electronic signature; and

B) The person may submit a batch upload of data corrections under one certification statement.

4) Upon receipt by the e-Manifest System of any correction submission, other interested persons shown on the manifest will be provided electronic notice of the submitter's corrections.

5) Other interested persons shown on the manifest may respond to the submitter's corrections with comments to the submitter, or by submitting another correction to the e-Manifest System, certified by the respondent as specified in subsection (l)(3), and with notice of the corrections to other interested persons shown on the manifest.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

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

Section 725.981 Definitions

As used in this Subpart CC, all terms not defined in this Section ~~Secton herein~~ will have the meanings given to them in section 1004 of RCRA, incorporated by reference in 35 Ill. Adm. Code 720.111, and 35 Ill. Adm. Code 720 through 728.

"Average volatile organic concentration" or "average VO concentration" means the mass-weighted average volatile organic concentration of a hazardous waste, as determined in accordance with the requirements of Section 725.984.

"Closure device" means a cap, hatch, lid, plug, seal, valve, or other type of fitting that blocks an opening in a cover so that when the device is secured in the closed position it prevents or reduces air pollutant emissions to the atmosphere. Closure devices include devices that are detachable from the cover (e.g., a sampling port cap), manually operated (e.g., a hinged access lid or hatch), or automatically operated (e.g., a spring-loaded pressure relief valve).

"Continuous seal" means a seal that forms a continuous closure that completely covers the space between the edge of the floating roof and the wall of a tank. A continuous seal may be a vapor-mounted seal, liquid-mounted seal, or metallic shoe seal. A continuous seal may be constructed of fastened segments so as to form a continuous seal.

"Cover" means a device that provides a continuous barrier over the hazardous waste managed in a unit to prevent or reduce air emissions to the atmosphere. A cover may have openings (such as access hatches, sampling ports, and gauge wells) that are necessary for operation,

inspection, maintenance, or repair of the unit on which the cover is used. A cover may be a separate piece of equipment that can be detached and removed from the unit or a cover may be formed by structural features permanently integrated into the design of the unit.

"Enclosure" means a structure that surrounds a tank or container, captures organic vapors emitted from the tank or container, and vents the captured vapors through a closed-vent system to a control device.

"External floating roof" means a pontoon-type or double-deck type cover that rests on the surface of a hazardous waste being managed in a tank with no fixed roof.

"Fixed roof" means a cover that is mounted on a unit in a stationary position and does not move with fluctuations in the level of the material managed in the unit.

"Floating membrane cover" means a cover consisting of a synthetic flexible membrane material that rests upon and is supported by the hazardous waste being managed in a surface impoundment.

"Floating roof" means a cover consisting of a double-deck, pontoon single-deck, or internal floating cover that rests upon and is supported by the material being contained, and is equipped with a continuous seal.

"Hard-piping" means pipe or tubing that is manufactured and properly installed in accordance with relevant standards and good engineering practices.

"In light material service" means that the container is used to manage a material for which both of the following conditions apply: the vapor pressure of one or more of the organic constituents in the material is greater than 0.3 kilopascals (kPa) at 20 °C ~~20° C~~ (1.2 inches H2O at 68 °~~F 68°~~ F); and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C ~~20° C~~ (1.2 inches H2O at 68 °~~F 68°~~ F) is equal to or greater than 20 percent by weight.

"Internal floating roof" means a cover that rests or floats on the material surface (but not necessarily in complete contact with it) inside a tank that has a fixed roof.

"Liquid-mounted seal" means a foam or liquid-filled primary seal mounted in contact with the hazardous waste between the tank wall and the floating roof, continuously around the circumference of the tank.

"Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure that is caused in part by poor maintenance or careless operation is not a malfunction.

"Maximum organic vapor pressure" means the sum of the individual organic constituent partial pressures exerted by the material contained in a tank at the maximum vapor pressure-causing conditions (i.e., temperature, agitation, pH effects of combining wastes, etc.) reasonably expected to occur in the tank. For the purpose of this Subpart CC, maximum organic vapor pressure is determined using the procedures specified in Section 725.984(c).

"Metallic shoe seal" means a continuous seal that is constructed of metal sheets that are held vertically against the wall of the tank by springs, weighted levers, or other mechanisms and which is connected to the floating roof by braces or other means. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

"No detectable organic emissions" means no escape of organics to the atmosphere, as determined using the procedure specified in Section 725.984(d).

"Point of waste origination" means as follows:

When the facility owner or operator is the generator of the hazardous waste, the "point of waste origination" means the point where a solid waste produced by a system, process, or waste management unit is determined to be a hazardous waste, as defined in 35 Ill. Adm. Code 721.

BOARD NOTE: In this case, this term is being used in a manner similar to the use of the term "point of generation" in air standards established for waste management operations under authority of the federal Clean Air Act in 40 CFR 60 (Standards of Performance for New Stationary Sources), 61 (National Emission Standards for Hazardous Air Pollutants), and 63 (National Emission Standards for Hazardous Air Pollutants for Source Categories).

When the facility owner and operator are not the generator of the hazardous waste, "point of waste origination" means the point where the owner or operator accepts delivery or takes possession of the hazardous waste.

"Point of waste treatment" means the point where a hazardous waste to be treated in accordance with Section 725.983(c)(2) exits the treatment process. Any waste determination must be made before the waste is conveyed, handled, or otherwise managed in a manner that allows the waste to volatilize to the atmosphere.

"Safety device" means a closure device, such as a pressure relief valve, frangible disc, fusible plug, or any other type of device that functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purpose of this Subpart CC, a safety device is not used for routine venting of gases or

vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in this vapor headspace in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on 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.

"Single-seal system" means a floating roof having one continuous seal. This seal may be vapor-mounted, liquid-mounted, or a metallic shoe seal.

"Vapor-mounted seal" means a continuous seal that is mounted so that there is a vapor space between the hazardous waste in the unit and the bottom of the seal.

"Volatile organic concentration" or "VO concentration" means the fraction by weight of organic compounds contained in a hazardous waste expressed in terms of parts per million (ppmw), as determined by direct measurement or by knowledge of the waste, in accordance with the requirements of Section 725.984. For the purpose of determining the VO concentration of a hazardous waste, organic compounds with a Henry's law constant value of at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8~~?~~x10-6 atmospheres/gram-mole/m3) at 25 °C (77 °F) ~~25° C (77° F)~~ must be included. Appendix F presents a list of compounds known to have a Henry's law constant value less than the cutoff level.

"Waste determination" means performing all applicable procedures in accordance with the requirements of Section 725.984 to determine whether a hazardous waste meets standards specified in this Subpart CC. Examples of a waste determination include performing the procedures in accordance with the requirements of Section 725.984 to determine the average VO concentration of a hazardous waste at the point of waste origination, determining the average VO concentration of a hazardous waste at the point of waste treatment and comparing the results to the exit concentration limit specified for the process used to treat the hazardous waste, the organic reduction efficiency and the organic biodegradation efficiency for a biological process used to treat a hazardous waste and comparing the results to the applicable standards, or determining the maximum volatile organic vapor pressure for a hazardous waste in a tank and comparing the results to the applicable standards.

"Waste stabilization process" means any physical or chemical process used to either reduce the mobility of hazardous constituents in a hazardous waste or eliminate free liquids as determined by Test Method 9095B (Paint Filter Liquids Test) in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", USEPA publication number

EPA-530/SW-846, incorporated by reference in 35 Ill. Adm. Code 720.111(a). A waste stabilization process includes mixing the hazardous waste with binders or other materials and curing the resulting hazardous waste and binder mixture. Other synonymous terms used to refer to this process are "waste fixation" or "waste solidification". This does not include the addition of absorbent materials to the surface of a waste to absorb free liquid without mixing, agitation, or subsequent curing.

(Source: Amended at 44 Ill. Reg. ____, effective ____)

Section 725.984 Waste Determination Procedures

a) Determination of Volatile Organic (VO) Concentration 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 725.983(c)(1) from using air emission controls in accordance with standards specified in Section 725.985 through Section 725.988, 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 725.983(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 VO concentration limits specified in Section 725.983(c)(1).

2) For a waste determination that is required by subsection (a)(1), the average VO concentration of a hazardous waste at the point of waste origination must be determined using either direct measurement, as specified in subsection (a)(3), or by knowledge of the waste, as specified in subsection (a)(4).

3) Direct Measurement

A) Identification. The owner or operator must identify and record the point of waste origination for the hazardous waste.

B) Sampling. Samples of the hazardous waste stream must be collected at the point of waste origination in such a manner that volatilization of organics contained in the waste and in the subsequent sample is

minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but must not exceed one year.

ii) A sufficient number of samples, but no fewer than four samples, must be collected for a hazardous waste determination. All of the samples for a given waste determination must be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the source or process generating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste stream are collected so that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of an acceptable sampling plan includes a plan incorporating sample collection and handling procedures in Reference Method 25D (Determination of the Volatile Organic Concentration of Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii), must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the source or process generating the hazardous waste represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with Reference Method 25D in appendix A to 40 CFR 60 for the total concentration of volatile organic constituents or using one or more methods when the individual organic compound concentrations are identified and summed and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8~~?~~ x 10-6 atmospheres/ gram-mole/m3) at 25 °C (77 °F). At the owner's or operator's discretion, the owner or operator may adjust test data measured by any appropriate method to discount any contribution to the total volatile

organic concentration that is a result of including a compound with a Henry's law constant value of less than 0.1 Y/X at 25 °C. If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 °C contained in the waste. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factor (fm25D) approved in writing by the Agency. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) and provided the requirement is met to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8 ~~?~~x 10-6 atmospheres/gram-mole/m3) at 25 °C.

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63 (Alternative Validation Procedure for EPA Waste and Wastewater Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b); or

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or 5.3, and the corresponding calculations in Section 6.1 or 6.3, of Method 301 (Field Validation of Pollutant Measurement Methods from Various Waste Media) in appendix A to 40 CFR 63 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations

i) The average VO concentration () on a mass-weighted basis must be calculated by using the results for all waste determinations conducted in accordance with subsections (a)(3)(B) and (a)(3)(C) and the following equation:

Where:

= Average VO concentration of the hazardous waste at the point of waste origination on a mass-weighted basis, in ~~ppmw;i~~ ppmwi= Individual waste determination "i" of the hazardous ~~wasten~~ wasten= Total number of waste determinations of the hazardous waste conducted for the averaging period (not to exceed one year)Qi = Mass quantity of the hazardous waste stream represented by Ci, in kg/~~hrQT~~ hrQT= Total mass quantity of the hazardous waste during the averaging period, in kg/~~hrCi~~ hrCi=
Measured VO concentration of waste determination "i", as determined in accordance with subsection (a)(3)(C) (i.e., the average of the four or more samples specified in subsection (a)(3)(B)(ii)), in ppmw

ii) For the purpose of determining Ci, for individual waste samples analyzed in accordance with subsection (a)(3)(C), the owner or operator must account for VO concentrations determined to be below the limit of detection of the analytical method by using the VO concentration determined according to subsection (a)(3)(G).

E) Provided that the test method is appropriate for the waste as required under subsection (a)(3)(C), the Agency must determine compliance based on the test method used by the owner or operator as recorded pursuant to Section 725.990(f)(1).

F) The quality assurance program elements required under subsections (a)(3)(C)(vi) and (a)(3)(C)(vii) are as follows:

i) Documentation of site-specific procedures to minimize the loss of compounds due to volatilization, biodegradation, reaction, or sorption during the sample collection, storage, preparation, introduction, and analysis steps.

ii) Measurement of the overall accuracy and precision of the specific procedures.

BOARD NOTE: Subsections (a)(3)(F)(i) and (a)(3)(F)(ii) are derived from 40 CFR 265.984(a)(3)(iii)(F)(1), (a)(3)(iii)(F)(2), (a)(3)(iii)(G)(1), and (a)(3)(iii)(G)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

G) VO concentrations below the limit of detection must be considered to be as follows:

i) If Reference Method 25D is used for the analysis, the VO concentration must be considered to be one-half the blank value determined in the method at Section 4.4 of Reference Method 25D.

ii) If any other analytical method is used, the VO concentration must be considered to be one-half the sum of the limits of detection established for each organic constituent in the waste that has a Henry's law constant value at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8 ~~?~~x 10-6 atmospheres/gram-mole/m3) at 25 °C (77 °F)~~ 25° C~~.

BOARD NOTE: Subsections (a)(3)(G)(i) and (a)(3)(G)(ii) are derived from 40 CFR 265.984(a)(3)(iv)(A)(1) and (a)(3)(iv)(A)(2), which the Board has codified here to comport with Illinois Administrative Code format requirements.

4) Use of Owner or Operator Knowledge

A) Documentation must be prepared that presents the information used as the basis for the owner's or operator's knowledge of the hazardous waste stream's average VO concentration. Examples of information that

may be used as the basis for knowledge include the following: material balances for the source or process generating the hazardous waste stream; constituent-specific chemical test data for the hazardous waste stream from previous testing that are still applicable to the current waste stream; previous test data for other locations managing the same type of waste stream; or other knowledge based on information included in manifests, shipping papers, or waste certification notices.

B) If test data are used as the basis for knowledge, then the owner or operator must document the test method, sampling protocol, and the means by which sampling variability and analytical variability are accounted for in the determination of the average VO concentration. For example, an owner or operator may use organic concentration test data for the hazardous waste stream that are validated in accordance with Method 301 as the basis for knowledge of the waste.

C) An owner or operator using chemical constituent-specific concentration test data as the basis for knowledge of the hazardous waste may adjust the test data to the corresponding average VO concentration value that would have been obtained had the waste samples been analyzed using Reference Method 25D. To adjust these data, the measured concentration for each individual chemical constituent contained in the waste is multiplied by the appropriate constituent-specific adjustment factor (fm25D).

D) In the event that the Agency and the owner or operator disagree on a determination of the average VO concentration for a hazardous waste stream using knowledge, then the results from a determination of average VO concentration using direct measurement, as specified in subsection (a)(3), must be used to establish compliance with the applicable requirements of this Subpart CC. The Agency may perform or request that the owner or operator perform this determination using direct measurement. The owner or operator may choose one or more appropriate methods to analyze each collected sample in accordance with the requirements of subsection (a)(3)(C).

b) Determination of VO Concentration at the Point of Waste Treatment

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 725.983(c)(2)(A) through (c)(2)(F) from using air emission controls in accordance with the standards specified in Sections 725.985 through 725.988, 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 treated waste stream is placed in the waste management unit exempt under Section 725.983(c)(2), (c)(3), or (c)(4) from using air emission controls. Thereafter, an owner or operator must update the information used for the waste determination at

least once every 12 months following the date of the initial waste determination.

B) An owner or operator must perform a new waste determination whenever changes to the process generating or treating the waste stream are reasonably likely to cause the average VO concentration of the hazardous waste to increase to such a level that the applicable treatment conditions specified in Section 725.983 (c)(2), (c)(3), or (c)(4) are not achieved.

2) The owner or operator must designate and record the specific provision in Section 725.983(c)(2) under which the waste determination is being performed. The waste determination for the treated hazardous waste must be performed using the applicable procedures specified in subsections (b)(3) through (b)(9).

3) Procedure for Determination of VO Concentration

A) Identification. The owner or operator must identify and record the point of waste treatment for the hazardous waste.

B) Sampling. Samples of the hazardous waste stream must be collected at the point of waste treatment in such a manner that volatilization of organics contained in the waste and in the subsequent sample is minimized and an adequately representative sample is collected and maintained for analysis by the selected method.

i) The averaging period to be used for determining the average VO concentration for the hazardous waste stream on a mass-weighted average basis must be designated and recorded. The averaging period can represent any time interval that the owner or operator determines is appropriate for the hazardous waste stream but must not exceed one year.

ii) A sufficient number of samples, but no fewer than four samples, must be collected and analyzed for a hazardous waste determination. All of the samples for a given waste determination must be collected within a one-hour period. The average of the four or more sample results constitutes a waste determination for the hazardous waste stream. One or more waste determinations may be required to represent the complete range of waste compositions and quantities that occur during the entire averaging period due to normal variations in the operating conditions for the process generating or treating the hazardous waste stream. Examples of such normal variations are seasonal variations in waste quantity or fluctuations in ambient temperature.

iii) All samples must be collected and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste stream are collected so that a minimum loss of organics occurs throughout the sample collection and handling process, and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the

facility operating records. An example of an acceptable sample collection and handling procedures for a total organic constituent concentration may be found in Reference Method 25D.

iv) Sufficient information, as specified in the "site sampling plan" required under subsection (a)(3)(B)(iii), must be prepared and recorded to document the waste quantity represented by the samples and, as applicable, the operating conditions for the process treating the hazardous waste represented by the samples.

C) Analysis. Each collected sample must be prepared and analyzed in accordance with Reference Method 25D for the total concentration of volatile organic constituents or using one or more methods when the individual organic compound concentrations are identified and summed, and the summed waste concentration accounts for and reflects all organic compounds in the waste with Henry's law constant values at least 0.1 mole-fraction-in-the-gas-phase/mole-fraction-in-the-liquid-phase (0.1 Y/X) (which can also be expressed as 1.8 ~~*~~x 10-6 atmospheres/gram-mole/m3) at 25 °C (77 ° F). When the owner or operator is making a waste determination for a treated hazardous waste that is to be compared to an average VO concentration at the point of waste origination or the point of waste entry to the treatment system, to determine if the conditions of 35 Ill. Adm. Code 724.982(c)(2)(A) through (c)(2)(F) or Section 725.983(c)(2)(A) through (c)(2)(F) are met, then the waste samples must be prepared and analyzed using the same method or methods as were used in making the initial waste determinations at the point of waste origination or at the point of entry to the treatment system. At the owner's or operator's discretion, the owner or operator may adjust test data obtained by any appropriate method to discount any contribution to the total volatile organic concentration that is a result of including a compound with a Henry's law constant value less than 0.1 Y/X at 25 °C. If the owner or operator elects to adjust test data, the adjustment must be made to all individual chemical constituents with a Henry's law constant value greater than or equal to 0.1 Y/X at 25 °C contained in the waste. To adjust these data, the measured concentration of each individual chemical constituent contained in the waste is multiplied by the constituent-specific adjustment factor (fm25D) approved in writing by the Agency. Other test methods may be used if they meet the requirements in subsection (a)(3)(C)(i) or (a)(3)(C)(ii) and provided the requirement is met to reflect all organic compounds in the waste with Henry's law constant values greater than or equal to 0.1 Y/X (which can also be expressed as 1.8 ~~?~~x 10-6 atmospheres/gram-mole/m3) at 25 °C.

i) Any USEPA standard method that has been validated in accordance with appendix D to 40 CFR 63, incorporated by reference in 35 Ill. Adm. Code 720.111(b); or

ii) Any other analysis method that has been validated in accordance with the procedures specified in Section 5.1 or 5.3, and the corresponding calculations in Section 6.1 or 6.3, of Method 301 in appendix A to 40 CFR 63, incorporated by reference in 35 Ill. Adm. Code

720.111(b). The data are acceptable if they meet the criteria specified in Section 6.1.5 or 6.3.3 of Method 301. If correction is required under Section 6.3.3 of Method 301, the data are acceptable if the correction factor is within the range 0.7 to 1.30. Other sections of Method 301 are not required.

D) Calculations. The average VO concentration () on a mass-weighted basis must be calculated by using the results for all samples analyzed in accordance with subsection (b)(3)(C) and the following equation:

Where:

= Average VO concentration of the hazardous waste at the point of waste treatment on a mass-weighted basis, in ~~ppmwi~~ ppmwi= Individual determination "i" of the hazardous ~~wasten~~ wasten= Total number of waste determinations of the hazardous waste collected for the averaging period (not to exceed one year)Qi =Mass quantity of the hazardous waste stream represented by Ci, in kg/~~hrQT~~ hrQT= Total mass quantity of hazardous waste during the averaging period, in kg/~~hrCi~~ hrCi= Measured VO concentration of waste determinations "i", as determined in accordance with the requirements of subsection (b)(3)(C) (i.e., the average of the four or more samples specified in subsection (b)(3)(B)(ii)), in ppmw
E) Provided that the test method is appropriate for the waste as required under subsection (b)(3)(C), compliance must be determined based on the test method used by the owner or operator as recorded pursuant to Section 725.990(f)(1).

4) Procedure for Determination of Exit Concentration Limit (Ct)

A) The point of waste origination for each hazardous waste treated by the process at the same time must be identified.

B) If a single hazardous waste stream is identified in subsection (b)(4)(A), then the exit concentration limit (Ct) must be 500 ppmw.

C) If more than one hazardous waste stream is identified in subsection (b)(4)(A), then the average VO concentration of each hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a). The exit concentration limit (Ct) must be calculated by using the results determined for each individual hazardous waste stream and the following equation:

Where:

Ct = Exit concentration limit for treated hazardous waste, in ~~ppmwx~~ ppmwx= Individual hazardous waste stream "x" that has an average VO concentration less than 500 ppmw at the point of waste origination, as

determined in accordance with the requirements of subsection (a)~~y~~ y= Individual hazardous waste stream "y" that has an average VO concentration equal to or greater than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a)m = Total number of "x" hazardous waste streams treated by ~~processn~~ processn= Total number of "y" hazardous waste streams treated by ~~processQx~~ processQx= Annual mass quantity of hazardous waste stream "x", in kg/yr Qy = Annual mass quantity of hazardous waste stream "y", in kg/~~yr~~ yrx= Average VO concentration of hazardous waste stream "x" at the point of waste origination, as determined in accordance with the requirements of subsection (a), in ppmw

5) Procedure for Determination of Organic Reduction Efficiency (R)

A) The organic reduction efficiency (R) for a treatment process must be determined based on results for a minimum of three consecutive runs.

B) All hazardous waste streams entering the process and all hazardous waste streams exiting the treatment process must be identified. The owner or operator must prepare a sampling plan for measuring these streams that accurately reflects the retention time of the hazardous waste in the process.

C) For each run, information must be determined for each hazardous waste stream identified in subsection (b)(5)(B), using the following procedures:

i) The mass quantity of each hazardous waste stream entering the process (Qb) and the mass quantity of each hazardous waste stream exiting the process (Qa) must be determined; and

ii) The average VO concentration at the point of waste origination of each hazardous waste stream entering the process (Cb) during the run must be determined in accordance with the requirements of subsection (a)(3). The average VO concentration at the point of waste treatment of each hazardous waste stream exiting the process (Ca) during the run must be determined in accordance with the requirements of subsection (b)(3).

D) The waste volatile organic mass flow entering the process (Eb) and the waste volatile organic mass flow exiting the process (Ea) must be calculated by using the results determined in accordance with subsection (b)(5)(C) and the following equations:

Where:

Ea = Waste volatile organic mass flow exiting the process, in kg/~~hrEb~~ hrEb= Waste volatile organic mass flow entering the process, in kg/~~hrm~~ hrm= Total number of runs (at least 3);j = Individual run "j"Qbj =

Mass quantity of hazardous waste entering the process during run "j", in kg/hr Qaj = Average mass quantity of waste exiting the process during run "j", in kg/hr= Average VO concentration of hazardous waste exiting the process during run "j", as determined in accordance with the requirements of subsection (b)(3), in ppmw = Average VO concentration of hazardous waste entering the process during run "j", as determined in accordance with the requirements of subsection (a)(3), in ppmw

E) The organic reduction efficiency of the process must be calculated by using the results determined in accordance with subsection (b)(5)(D) and the following equation:

Where:

R = Organic reduction efficiency, in ~~percentEb~~ percentEb= Waste volatile organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/~~hrEa~~ hrEa= Waste volatile organic mass flow exiting the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr

6) Procedure for Determination of Organic Biodegradation Efficiency (Rbio)

A) The fraction of organics biodegraded (Fbio) must be determined using the procedure specified in appendix C to 40 CFR 63 (Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

B) The organic biodegradation efficiency (Rbio) must be calculated by using the following equation:

Where:

Rbio = Organic biodegradation efficiency, in ~~percentFbio~~ percentFbio= Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(6)(A)

7) Procedure for Determination of Required Organic Mass Removal Rate (RMR)

A) All of the hazardous waste streams entering the treatment process must be identified.

B) The average VO concentration of the hazardous waste stream at the point of waste origination must be determined in accordance with the requirements of subsection (a).

C) For each individual hazardous waste stream that has an average volatile organic concentration equal to or greater than 500 ppmw at the

point of waste origination, the average volumetric flow rate of hazardous waste and the density of the hazardous waste stream at the point of waste origination must be determined.

D) The required organic mass removal rate (RMR) for the hazardous waste must be calculated by using the average VO concentration, average volumetric flow rate, and density determined for each individual hazardous waste stream, and the following equation:

Where:

RMR = Required organic mass removal rate, in kg/hr;y = Individual hazardous waste stream "y" that has an average volatile organic (VO) concentration equal to or greater than 500 ppmw at the point of waste origination, as determined in accordance with the requirements of subsection (a)n = Total number of "y" hazardous waste streams treated by ~~processVy~~ processVy= Average volumetric flow rate of hazardous waste stream "y" at the point of waste origination, in m3/~~hrky~~ hrky= Density of hazardous waste stream "y", in kg/m3 = Average VO concentration of hazardous waste stream "y" at the point of waste origination, as determined in accordance with the requirements of subsection (a), in ppmw

8) Procedure for Determination of Actual Organic Mass Removal Rate (MR)

A) The actual organic mass removal rate (MR) must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste volatile organic mass flow entering the process (Eb) and the waste volatile organic mass flow exiting the process (Ea) must be determined in accordance with the requirements of subsection (b)(5)(D).

C) The actual organic mass removal rate (MR) must be calculated by using the mass flow rate determined in accordance with the requirements of subsection (b)(8)(B) and the following equation:

Where:

MR = Actual organic mass removal rate, in kg/~~hrEb~~ hrEb= Waste volatile organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/~~hrEa~~ hrEa= Waste volatile organic mass flow exiting the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/hr

9) Procedure for Determination of Actual Organic Mass Biodegradation Rate (MRbio)

A) The actual organic mass biodegradation rate (MRbio) must be determined based on results for a minimum of three consecutive runs. The sampling time for each run must be one hour.

B) The waste organic mass flow entering the process (Eb) must be determined in accordance with the requirements of subsection (b)(5)(D).

C) The fraction of organic biodegraded (Fbio) must be determined using the procedure specified in appendix C to 40 CFR 63 (Determination of the Fraction Biodegraded (Fbio) in a Biological Treatment Unit), incorporated by reference in 35 Ill. Adm. Code 720.111(b).

D) The actual organic mass biodegradation rate (MRbio) must be calculated by using the mass flow rates and fraction of organic biodegraded, as determined in accordance with the requirements of subsections (b)(9)(B) and (b)(9)(C), respectively, and the following equation:

Where:

MRbio = Actual organic mass biodegradation rate, in kg/~~hrEb~~ hrEb=
Waste organic mass flow entering the process, as determined in accordance with the requirements of subsection (b)(5)(D), in kg/~~hrFbio~~ hrFbio= Fraction of organic biodegraded, as determined in accordance with the requirements of subsection (b)(9)(C)

c) Procedure for Determination of VO in a Tank

1) An owner or operator must determine the maximum organic vapor pressure for each hazardous waste placed in a tank using Tank Level 1 controls in accordance with standards specified in Section 725.985(c).

2) An owner or operator must use either direct measurement, as specified in subsection (c)(3), or knowledge of the waste, as specified by subsection (c)(4), to determine the maximum organic vapor pressure that is representative of the hazardous waste composition stored or treated in the tank.

3) Direct Measurement to Determine VO

A) Sampling. A sufficient number of samples must be collected to be representative of the waste contained in the tank. All samples must be conducted and handled in accordance with written procedures prepared by the owner or operator and documented in a site sampling plan. This plan must describe the procedure by which representative samples of the hazardous waste are collected so that a minimum loss of organics occurs throughout the sample collection and handling process and by which sample integrity is maintained. A copy of the written sampling plan must be maintained on-site in the facility operating records. An example of acceptable sample collection and handling procedures may be found in Reference Method 25D.

B) Analysis. Any appropriate one of the following methods may be used to analyze the samples and compute the maximum organic vapor pressure of the hazardous waste:

i) Reference Method 25E (Determination of Vapor Phase Organic Concentration in Waste Samples) in appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b);

ii) Methods described in API publication 2517 (Evaporative Loss from External Floating-Roof Tanks), incorporated by reference in 35 Ill. Adm. Code 720.111(a);

iii) Methods obtained from standard reference texts;

iv) ASTM Method D 2879-92 (Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope), incorporated by reference in 35 Ill. Adm. Code 720.111(a); or

v) Any other method approved by the Agency.

4) Use of Knowledge to Determine the Maximum Organic Vapor Pressure of the Hazardous Waste. Documentation must be prepared and recorded that presents the information used as the basis for the owner's or operator's knowledge that the maximum organic vapor pressure of the hazardous waste is less than the maximum vapor pressure limit listed in Section 725.985(b)(1)(A) for the applicable tank design capacity category. An example of information that may be used is documentation that the hazardous waste is generated by a process for which at other locations it previously has been determined by direct measurement that the waste maximum organic vapor pressure is less than the maximum vapor pressure limit for the appropriate tank design capacity category.

d) The procedure for determining no detectable organic emissions for the purpose of complying with this Subpart CC is as follows:

1) The test must be conducted in accordance with the procedures specified in Reference Method 21 (Determination of Volatile Organic Compound Leaks) of appendix A to 40 CFR 60 (Test Methods), incorporated by reference in 35 Ill. Adm. Code 720.111(b). Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices must be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to, any of the following: the interface of the cover and its foundation mounting, the periphery of any opening on the cover and its associated closure device, and the sealing seat interface on a spring-loaded pressure relief valve.

2) The test must be performed when the unit contains a hazardous waste having an organic concentration representative of the range of concentrations for the hazardous waste expected to be managed in the

unit. During the test, the cover and closure devices must be secured in the closed position.

3) The detection instrument must meet the performance criteria of Reference Method 21, except the instrument response factor criteria in Section 3.1.2(a) of Reference Method 21 must be for the average composition of the organic constituents in the hazardous waste placed in the waste management unit, not for each individual organic constituent.

4) The detection instrument must be calibrated before use on each day of its use by the procedures specified in Reference Method 21.

5) Calibration gases must be as follows:

A) Zero air (less than 10 ppmv hydrocarbon in air), and

B) A mixture of methane or n-hexane in air at a concentration of approximately, but less than, 10,000 ppmv methane or n-hexane.

6) The background level must be determined according to the procedures in Reference Method 21.

7) Each potential leak interface must be checked by traversing the instrument probe around the potential leak interface as close to the interface as possible, as described in Reference Method 21. If the configuration of the cover or closure device prevents a complete traverse of the interface, all accessible portions of the interface must be sampled. If the configuration of the closure device prevents any sampling at the interface and the device is equipped with an enclosed extension or horn (e.g., some pressure relief devices), the instrument probe inlet must be placed at approximately the center of the exhaust area to the atmosphere.

8) The arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 500 ppmv except when monitoring a seal around a rotating shaft that passes through a cover opening, in which case the comparison must be as specified in subsection (d)(9). If the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

9) For the seals around a rotating shaft that passes through a cover opening, the arithmetic difference between the maximum organic concentration indicated by the instrument and the background level must be compared with the value of 10,000 ppmw. If the difference is less than 10,000 ppmw, then the potential leak interface is determined to operate with no detectable organic emissions.

(Source: Amended at 44 Ill. Reg. ____, effective _____)

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