

ILLINOIS POLLUTION CONTROL BOARD  
August 22, 1984

In the matter of: )  
)  
PROHIBITION ON LANDFILLING ) R81-25  
OF HALOGENATED SOLVENTS (CBE) )

PROPOSED RULE. SECOND NOTICE

THIRD PROPOSED ORDER OF THE BOARD (by J. Anderson):

On March 8, 1984 the Board proposed to adopt 35 Ill. Adm. Code 729. The proposal appeared at 8 Ill. Reg. 4425, April 6, 1984. The Board received one public comment, from Waste Management of Illinois, Inc. On June 29, 1984 the Board adopted other provisions of Part 729 in connection with the liquid hazardous waste prohibition (R83-28). The Board has modified the proposal in response to the comment and to make it consistent with R83-28.

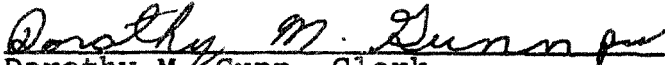
The procedural provisions of proposed Sections 729.120-729.140 will be replaced by slight modifications to the procedures adopted as Part 709 in R83-28. The rest of Part 729 will now appear as an amendment to the emergency rules adopted in R83-28, rather than as a new Part.

The full text of the modified proposal is attached to this Order. A second notice will be prepared reflecting the modified proposal. Because of its length, the proposal will not be published with the Opinion volumes, but will be distributed to participants and made available to the public. This Order is supported by a Third Proposed Opinion adopted this same date.

IT IS SO ORDERED.

Board Member Bill Forcade abstained.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 22<sup>nd</sup> day of August, 1984 by a vote of 5-0.

  
Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board

TITLE 35: ENVIRONMENTAL PROTECTION  
SUBTITLE G: WASTE DISPOSAL  
CHAPTER I: POLLUTION CONTROL BOARD  
SUBCHAPTER b: PERMITS

PART 709  
WASTESTREAM AUTHORIZATIONS

SUBPART A: GENERAL PROVISIONS

Section  
709.102 Definitions  
Emergency  
709.103 Continuation of Existing Authorizations  
Emergency  
709.104 Expiration of Supplemental Permits  
Emergency  
709.105 Severability  
Emergency

SUBPART B: PROHIBITIONS

Section  
709.201 Liquid Hazardous Waste Authorization  
Emergency

SUBPART C: APPLICATIONS

Section  
709.301 Application for Liquid Hazardous Waste  
Emergency  
709.302 Signatures  
Emergency

SUBPART D: REVIEW OF WASTESTREAMS

Section  
709.401 Standard for Issuance for Liquid Hazardous Waste  
Emergency

SUBPART E: CONDITIONS OF WASTESTREAM AUTHORIZATIONS

Section  
709.501 Duration  
Emergency  
709.510 General Conditions  
Emergency  
709.520 Authorized Methods of Disposal  
Emergency

SUBPART F: MODIFICATION, REVOCATION AND APPEAL

Section  
709.601 Modification  
Emergency  
709.602 Revocation  
Emergency  
709.603 Appeal  
Emergency

AUTHORITY: Implementing Sections 22(g) and 22.6 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1983, ch. 111 1/2, pars. 1022(g), 1022.6, as amended by P.A. 83-1078, and 1027).

SOURCE: Emergency rule adopted in R83-28 at 8 Ill. Reg. \_\_\_\_\_, effective July 5, 1984 for a maximum of 150 days; amended in R81-25 at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART A: GENERAL PROVISIONS

Section 709.104 Expiration of Supplemental Permits  
Emergency

- a) Supplemental permits, issued pursuant to 35 Ill. Adm. Code 807.210, for wastestreams which are prohibited under 35 Ill. Adm. Code 729.240, 729.241, 729.242 or 729.310, shall be void after the effective date of this Section the Section which prohibits the waste.
- b) The Agency shall review existing supplemental permits to identify those which appear to authorize disposal in landfills of wastes which are prohibited ~~under 35 Ill. Adm. Code 729.310~~. The Agency shall give each permittee the opportunity to demonstrate compliance with ~~35 Ill. Adm. Code 729.310~~ the prohibitions before modifying or denying a supplemental permit.

(Source: Amended at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART D: REVIEW OF WASTESTREAMS

Section 709.401 Standard for Issuance for Liquid Hazardous Waste  
Emergency

- a) The Agency shall issue a wastestream authorization for the land disposal of a liquid hazardous waste

only after the generator has reasonably demonstrated that, considering current technological feasibility and economic reasonableness, the hazardous waste cannot be reasonably solidified, stabilized or recycled for reuse, nor incinerated or chemically, physically or biologically treated so as to neutralize the hazardous waste and render it nonhazardous, and that land disposal is not prohibited or limited by Board regulations.

- b) The Agency shall issue a wastestream authorization for the land disposal of the residual from the treatment of a liquid hazardous waste if and only if the original generator or treater demonstrates that the residual meets one of the standards of 35 Ill. Adm. Code 729.310(b) and that land disposal is not prohibited or limited by Board regulations.
- c) For wastes which are neither a liquid hazardous waste nor a residual from the treatment of a liquid hazardous waste, the Agency may issue a wastestream authorization upon a finding that the wastestream is not subject to any other landfilling prohibition.

(Source: Amended at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

PART 729  
LANDFILLS: PROHIBITED HAZARDOUS WASTES

SUBPART A: GENERAL

Section  
729.100 Purpose, Scope and Applicability  
Emergency  
729.101 Severability  
Emergency

SUBPART B: HALOGENATED SOLVENTS

Section  
729.200 Purpose, Scope and Applicability  
729.201 No Circumvention  
729.202 Incorporations by Reference  
729.203 Waste Analysis Plan  
729.204 Land Treatment Demonstration  
729.220 Definitions  
729.221 Halogenated Compound--Definition  
729.222 Halogenated Solvent--Definition  
729.223 Halogen Content Presumption  
729.224 Partition Presumption  
729.240 Non-aqueous Liquid Phases which are Halogenated Solvents  
729.241 Aqueous Solutions of Halogenated Compounds  
729.242 Solids Containing Halogenated Compounds  
729.262 Recycling Residues  
729.263 Small Quantity Generators

SUBPART C: LIQUID HAZARDOUS WASTES

Section  
729.301 Definitions  
Emergency  
729.302 Waste Analysis Plan  
Emergency  
729.310 Liquid Hazardous Waste Prohibitions  
Emergency  
729.311 Prohibition of Liquids in Hazardous Waste Landfills  
Emergency  
729.320 Test for Liquids  
Emergency

Section  
729.321 Load-bearing Capacity Test  
Emergency

AUTHORITY: Implementing Sections 22(g), 22.4(b) and 22.6 and authorized by Sections 22.6 and 27 of the Environmental Protection Act (Ill. Rev. Stat. 1983, ch. 111 1/2, pars. 1022(g), 1022.4(b), 1022.6, as amended by P.A. 83-1078, and 1027).

SOURCE: Emergency rule adopted in R83-28A at 8 Ill. Reg. \_\_\_\_\_, effective July 5, 1984 for a maximum of 150 days; amended in R81-25 at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART A: GENERAL

Section 729.100 Purpose, Scope and Applicability  
Emergency

- a) The purpose of this Part is to prohibit the disposal of certain hazardous wastes in landfills. "Hazardous waste" is as defined in 35 Ill. Adm. Code 721. Wastestream authorizations may be required pursuant to 35 Ill. Adm. Code 709.
- b) Unless otherwise indicated, the requirements of this Part apply to all landfills, or "sanitary landfills" as defined in the Environmental Protection Act (Act) (Ill. Rev. Stat. 1981, ch. 111 1/2, par. 1001). Landfills include both non-hazardous and hazardous waste landfills permitted under Sections 21(d) or 21(f) of the Act. Unless otherwise indicated, landfills include surface impoundments and waste piles in which waste residues are expected to remain after closure, and land application of hazardous waste.
- c) The provisions of 35 Ill. Adm. Code 721.105 notwithstanding, the landfilling prohibitions of this Part apply to all persons, including small quantity generators, unless otherwise indicated in this Part.
- d) The landfilling prohibitions of this Part do not apply to residues of hazardous waste in containers, or empty liners removed from containers, as defined in 35 Ill. Adm. Code 721.107.
- e) The provisions of this Part are intended to supplement the requirements of 35 Ill. Adm. Code 722, 723, 724, 725, 807 and 809. No provisions of those

regulations should be read as permitting the disposal of any hazardous waste in any manner prohibited under this Part.

- f) The provisions of this Part are intended to proscribe any conduct by generators, transporters, treaters or disposers of waste which results in placement of a prohibited waste in a landfill.

(Source: Amended at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ )

Section 729.101 Severability  
Emergency

If any provision of this Part is adjudged invalid, or if the application to any person or in any circumstance is adjudged invalid, such invalidity shall not affect the validity of this Part as a whole, or of any Subpart, Section, paragraph, sentence or clause which has not been adjudged invalid.

(Source: Amended at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_ )

SUBPART B: HALOGENATED SOLVENTS

Section 729.200 Purpose, Scope and Applicability

- a) This Subpart prohibits the landfilling of wastes containing halogenated compounds. Rules are included to differentiate these from other wastes.
- b) Halogenated compounds are a class of organic solvents. As a class halogenated compounds are not very soluble in water; therefore, in a complex system, they will be found in a non-aqueous phase associated with any other organic solvents present. This Subpart assumes that any halogenated compounds present will be more concentrated in any non-aqueous liquid phase. The halogen concentration in the non-aqueous liquid phase is used to determine whether the phase should be regulated as an halogenated solvent or as an organic solvent.

- c) Organic solvent phases, whether they include halogenated compounds or not, pose a threat to the impermeability of clay and synthetic landfill liners.
- d) Aqueous solutions of halogenated compounds placed directly into the landfill, could damage synthetic liners and move into groundwater.
- e) Because of their differing impacts on landfills, the Board intends to encourage the separation prior to disposal of phases in multiphase wastes, and intends to encourage the separation of wastestreams during generation to avoid the formation of multiphase wastes.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.201      No Circumvention

- a) No person shall cause or allow the mixing or dilution of wastes containing halogenated compounds in order to evade the landfilling prohibitions of this Subpart.
- b) For purposes of determining quantity exemptions, any waste which is transferred prior to ultimate disposal shall be attributed to the last person who used the solvent.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.202      Incorporations by Reference

The following materials are incorporated by reference:

- a) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103:
  - 1) ASTM D2361-66 (Reapproved 1978)
  - 2) ASTM E442-74 (Reapproved 1981)
- b) Paint filter test proposed at 47 Fed. Reg. 831, February 25, 1982, and at 47 Fed. Reg. 12317, March 22, 1982.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)



Section 729.203      Waste Analysis Plan

The owner or operator of a landfill disposing of hazardous waste must, within thirty days after the effective date of this section, develop and follow a written waste analysis plan which describes the procedures which he will carry out to ensure that the facility complies with the prohibition stated in this Subpart. The owner or operator must keep this plan at the facility. A copy of the plan shall be submitted to the Agency within thirty days after the effective date of this section.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.204      Land Treatment Demonstration

This Subpart shall not bar the issuance of a RCRA permit for land treatment of hazardous waste if the owner or operator demonstrates, pursuant to 35 Ill. Adm. Code 703.206, 703.230 and 724.372, that any halogenated compounds in the waste will be completely degraded, transformed or immobilized in the treatment zone.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.220      Definitions

As used in this Subpart, terms have the following meanings:

Aqueous phase: A "phase" in which water is the solvent, constituting more than 500 g/kg.

Component: An element or compound present in a "phase" or "system".

Emulsion: A "system", including two or more liquid "phases", which is not separated into layers. For purposes of this Subpart, an emulsion which does not form layers within one hour is one phase.

Liquid: A waste, or part of a waste, which yields any fluid when subjected to the paint filter test described in Section 729.320. If such Section for any reason becomes invalid, the paint filter test incorporated by reference in Section 729.202(b) shall be substituted.

Non-aqueous phase: A "phase" which contains 500 g/kg or less of water.

One-phase system: A "system" with one and only one "phase".

Phase: A physically distinct portion of a dispersion or solution which at least in principle could be mechanically separated from the remainder of the material. For purposes of this Subpart, a container is not a phase, nor is a vapor above a waste. Emulsions and suspensions are a single phase if they do not form layers within one hour.

Solid: A waste, or part of a waste, which contains no free liquid as determined from the paint filter test described in Section 729.320. If such test for any reason becomes invalid, the paint filter test incorporated by reference in Section 729.202(b) shall be substituted.

Suspension: A "system", including a "solid" phase and a "liquid" phase, which is not separated into layers. For purposes of this Subpart, a suspension which does not form layers within one hour is one phase.

System: A single isolated "phase" or a set of two or more "phases" which are in physical contact.

Two-phase system: A "system" with two "phases".

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.221 Halogenated Compound--Definition

As used in this Subpart, the term "halogenated compound" shall mean any of the following chemicals:

<u>B010</u>	<u>benzene, chloro-</u>
<u>B020</u>	<u>benzene, 1,2-dichloro-</u>
<u>B090</u>	<u>carbon tetrachloride</u>
<u>B030</u>	<u>chlorinated fluorocarbons</u>
<u>B040</u>	<u>ethane, 1,1,1-trichloro-</u>
<u>B050</u>	<u>ethane, 1,1,2-trichloro-1,2,2-trifluoro-</u>
<u>B060</u>	<u>ethene, tetrachloro-</u>
<u>B070</u>	<u>ethene, trichloro-</u>
<u>B070</u>	<u>ethinyl trichloride</u>
<u>B080</u>	<u>methane, dichloro-</u>
<u>B090</u>	<u>methane, tetrachloro-</u>
<u>B100</u>	<u>methane, trichlorofluoro-</u>
<u>B040</u>	<u>methyl chloroform</u>
<u>B080</u>	<u>methylene chloride</u>
<u>B080</u>	<u>methylene dichloride</u>
<u>B020</u>	<u>orthodichlorobenzene</u>
<u>B060</u>	<u>perchloroethylene</u>
<u>B010</u>	<u>phenyl chloride</u>
<u>B060</u>	<u>tetrachloroethylene</u>
<u>B070</u>	<u>trichloroethylene</u>
<u>B100</u>	<u>trichloromonofluoromethane</u>

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.222 Halogenated Solvent--Definition

An "halogenated solvent" is a non-aqueous liquid phase containing more than 14,000 mg of halogenated compounds in any 1 kg.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.223 Halogen Content Presumption

A non-aqueous liquid phase containing 10,000 mg/kg, or more, total organic halogen is assumed to be an halogenated solvent unless it is shown that less than 14,000 mg of the halogenated compounds listed in Section 729.221 are present in any 1 kg of the phase.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.224 Partition Presumption

It is assumed that, in a multi-phase system, the concentration of halogenated compounds and the total organic halogen concentration in any non-aqueous phase exceeds the concentration of halogenated compounds and the total organic halogen concentration, respectively, in the entire system and in any aqueous phase, unless the contrary is shown.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.240 Non-aqueous Liquid Phases which are Halogenated Solvents

No person shall cause or allow any hazardous waste containing a non-aqueous liquid phase which is an halogenated solvent to be placed in any landfill.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.241 Aqueous Solutions of Halogenated Compounds

- a) No person shall cause or allow to be placed in any landfill any hazardous waste containing an aqueous liquid phase containing more than 14,000 mg of halogenated compounds in any 1 kg.
- b) An aqueous liquid phase containing more than 10,000 mg of total organic halogen in any 1 kg is assumed to contain more than 14,000 mg of halogenated compounds per kilogram, unless the contrary is shown.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.242      Solids Containing Halogenated Compounds

- a) No person shall cause or allow any hazardous waste which is a solid to be placed in any landfill if the waste forms a non-aqueous liquid phase which is an halogenated solvent when a representative sample of the waste is mixed with water.
- b) The prohibition of paragraph (a) shall become effective on July 1, 1986.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.262      Recycling Residues

This Subpart does not apply to sludges and still bottoms produced from recycling of halogenated solvents in which at least 30% of the waste is recovered for reuse. This exemption shall expire on July 1, 1986.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 729.263      Small Quantity Generators

This Subpart applies only to hazardous waste for which a manifest must be prepared pursuant to 35 Ill. Adm. Code 722.120 or 809.501.

(Source: Added at 8 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)