## ILLINOIS POLLUTION CONTROL BOARD October 25, 1984

| In th | e Matter | of:                   | )      |        |
|-------|----------|-----------------------|--------|--------|
|       |          | LANDFILLI<br>SOLVENTS | )<br>) | R81-25 |

FINAL ORDER. ADOPTED RULE 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 16, 1984. On August 22, 1984 the Board revised the proposal in response to public comment, and sent the proposal to second notice. The Joint Committee on Administrative Rules met on October 18, 1984 without objecting to the rules. The Board will make the following modifications to the proposal in response to comments from the Joint Committee staff:

- 1. Replace the amendments to Part 709 with Section 729.205 dealing with the effect of the halogenated solvent ban on wastestream authorizations and supplemental permits.
- 2. Modify the final sentence of Section 729.100(b) to place "landfills" in quotes, and to delete "of hazardous waste".
- 3. To include a statement that future editions or amendments are not referenced in Section 729.202.
- 4. To delete alternative references to the proposed federal paint filter test from Sections 729.202 and 729.220.
- 5. To add a definition of "TOX test" to Section 729.220.
- 6. To specify the TOX test in Sections 729.223 and 729.241(b), and to specify "a more definitive test whose validity is demonstrated to the Agency."
- 7. To add "by a test whose validity is demonstrated to the Agency" to Section 729.224.
- 8. To reword Section 729.263 to provide that the Subpart applies only to hazardous waste for which a manifest "would have to be prepared...if the waste were transported off the site or facility."

9. To make minor editorial changes to Sections 729.100(b), 729.203 and 729.204.

The complete text of the rules as adopted is attached to this Order. Striking and underlining relate to the Part 729 emergency rules for liquid hazardous waste adopted in R83-28A on June 29, 1984, 8 Ill. Reg. 12668, July 13, 1984.

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 25th day of October, 1984 by a vote of 4-0.

Dorothy M. Gunn, Clerk

# 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<br>729.101<br>Emergency | Severabi: | lity  |     |               |

#### 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                    |
| 729.205  | Effect on Wastestream Authorizations and        |
| Control of the Contro | Supplemental Permits                            |
| 729.220  | Definitions                                     |
| 729.221  | Halogenated CompoundDefinition                  |
| 729.222  | Halogenated SolventDefinition                   |
| 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. 12668, 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.
- b) Unless otherwise indicated, tThe requirements of this Part apply to all landfills, or "sanitary landfills" as defined in the Environmental Protection Act (Act) (Ill. Rev. Stat. 198±3, ch. 111 1/2, par. 1001 et seq.). Landfills include both non-hazardous and hazardous waste landfills permitted under Sections 21(d) or 21(f) of the Act. Unless otherwise indicated, "landfills" includes surface impoundments and waste piles in which waste residues are expected to remain after closure, and land application.
- 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 III. Reg, effective   |
|--|
| Section 729.101 Severability   |
| 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.

- Organic solvent phases, whether they include c) 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.
- Because of their differing impacts on landfills, e) 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 multi-  |
|------------|---|
|            | phase wastes.   |
| (Source:   | Added at 8 Ill. Reg, effective)   |
| Section 72 | No Circumvention  |
| <u>a)</u>  | 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.        |
| <u>b)</u>  | 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 72 | 29.202 Incorporations by Reference  |

- a) The following materials are incorporated by reference: American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA <u>19103:</u>
  - 1) ASTM D2361-66 (Reapproved 1978)
  - 2) ASTM E442-74 (Reapproved 1981)
- **b**) This Part incorporates no future editions or amendments.

| (Source: | Added                        | at            | 8 | Ill.             | Rea. | , effective ) |
|----------|------------------------------|---------------|---|------------------|------|---------------|
| 100000   | the market and all the state | Section 1970. | 0 | and the same and | 2000 | 7             |

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 the owner or operator 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 pursuant to Section 21(f) of the Act and 35 Ill. Adm. Code 703 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 729.205** Effect on Wastestream Authorizations and Supplemental Permits 35 Ill. Adm. Code 709 notwithstanding, the Agency shall not issue a wastestream authorization for any waste prohibited pursuant to this Subpart. Supplemental permits for wastestreams which are prohibited pursuant to this Subpart shall be void after the effective date of this Section. (Source: Added at 8 Ifl. 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.

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.

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.

TOX test: Either of the tests for total organic halogen incorporated by reference in Section 729.202, ASTM D2361-66 (Reapproved 1978) or ASTM E442-74 (Reapproved 1981).

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:

| B010 | benzene, chloro-                         |
|------|--|
| B020 | benzene, 1,2-dichloro-                   |
| B090 | carbon tetrachloride                     |
| B030 | chlorinated fluorocarbons                |
| B040 | ethane, l,l,l-trichloro-                 |
| B050 | ethane, 1,1,2-trichloro-1,2,2-trifluoro- |
| B060 | ethene, tetrachloro-                     |
| B070 | ethene, trichloro-                       |
| B070 | ethinyl trichloride                      |
| B080 | methane, dichloro-                       |
| B090 | methane, tetrachloro-                    |
| B100 | methane, trichlorofluoro-                |
|      |  |

| B060<br>B070   | methyl chloroform methylene chloride methylene dichloride orthodichlorobenzene perchloroethylene phenyl chloride tetrachloroethylene trichloroethylene trichloromonofluoromethane  |
|--|--|
| (Source:   | Added at 8 Ill. Reg, effective)  |
| Section 72   | 29.222 Halogenated SolventDefinition   |
| An "haloge containing in any 1   | enated solvent" is a non-aqueous liquid phase more than 14,000 mg of halogenated compounds   |
| (Source:   | Added at 8 Ill. Reg, effective)  |
| Section 72   | 29.223 <u>Halogen Content Presumption</u>  |
| assumed to   | eous liquid phase containing 10,000 mg/kg, or more, anic halogen, as measured by the TOX test, is to be an halogenated solvent unless it is shown, definitive test whose validity is demonstrated to the that less than 14,000 mg of the halogenated listed in Section 729.221 are present in any 1 kg ase.  |
|  | Added at 8 Ill. Reg, effective)  29.224 Partition Presumption  |
| It is assu<br>tration of<br>halogen co<br>concentrat<br>halogen co<br>and in any | med that, in a multi-phase system, the concen- f halogenated compounds and the total organic encentration in any non-aqueous phase exceeds the cion of halogenated compounds and the total organic encentration, respectively, in the entire system of aqueous phase, unless the contrary is shown by esse validity is demonstrated to the Agency. |
| (Source: Section 72  | Added at 8 Ill. Reg, effective)  29.240  Non-aqueous Liquid Phases which are Halogenated Solvents  |
| to be place  | shall cause or allow any hazardous waste containing eous liquid phase which is an halogenated solvent ced in any landfill.   |
| (Source:   | Added at 8 Ill. Reg, effective)  |

### Section 729.241 Aqueous Solutions of Halogenated Compounds No person shall cause or allow to be placed in any a) landfill any hazardous waste containing an aqueous liquid phase containing more than 14,000 mg of halogenated compounds in any 1 kg. An aqueous liquid phase containing more than **b**) 10,000 mg of total organic halogen, as measured by the TOX test, in any 1 kg is assumed to contain more than 14,000 mg of halogenated compounds per kilogram, unless the contrary is shown by a more definitive test whose validity is demonstrated to the Agency. (Source: Added at 8 Ill. Reg. , effective ) Section 729.242 Solids Containing Halogenated Compounds No person shall cause or allow any hazardous waste a) 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 would have to be prepared pursuant to 35 Ill. Adm. Code 722.120 or 809.501 if the waste were transported off the site or facility. (Source: Added at 8 Ill. Reg. \_\_\_\_, effective \_\_\_\_)