ILLINOIS POLLUTION CONTROL BOARD April 12, 1990

IN THE MATTER OF:

RCRA UPDATE, USEPA REGULATIONS
(7-1-89 THROUGH 12-31-89)

R90-2
(Rulemaking)

PROPOSAL FOR PUBLIC COMMENT

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

Pursuant to Section 22.4(a) of the Environmental Protection Act (Act), the Board proposing to amend the RCRA hazardous waste regulations.

Section 22.4 of the Act governs adoption of regulations establishing the RCRA program in Illinois. Section 22.4(a) provides for quick adoption of regulations which are "identical in substance" to federal regulations; Section 22.4(a) provides that Title VII of the Act and Section 5 of the Administrative Procedure Act shall not apply. Because this rulemaking is not subject to Section 5 of the Administrative Procedure Act, it is not subject to first notice or to second notice review by the Joint Committee on Administrative Rules (JCAR). The federal RCRA regulations are found at 40 CFR 260 through 270. This rulemaking updates Illinois' RCRA rules to correspond with USEPA amendments during the period July 1 through December 31, 1989.

The text of the proposed amendments is attached to this Order, which will be mailed to persons on the notice list. The proposal will be published in the Illinois Register. The Board will receive public comment for 45 days after publication in the Illinois Register. Because of its length, the text of proposed rules will not appear in the Opinion volumes.

This Proposed Order is supported by a Proposed Opinion adopted this same day.

IT IS SO ORDERED

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Order was adopted on the $\frac{1}{2}$ day of $\frac{1}{2}$, 1990, by a vote of $\frac{1}{2}$.

Dorothy M. Gynn, Clerk

Illinois Polylution Control Board

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

SUBCHAPTER b: PERMITS

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Appendix A Classification of Permit Modifications

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1988 Supp., ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R82-19, 53 PCB 131, at 7 III. Reg. 14289, effective October 12, 1983; amended in R83-24 at 8 III. Reg. 206, effective December 27, 1983; amended in R84-9 at 9 III. Reg. 11899, effective July 24, 1985; amended in R85-22 at 10 III. Reg. 1110, effective January 2, 1987; amended in R85-23 at 10 III. Reg. 13284, effective July 28, 1986; amended in R86-1 at 10 III. Reg. 14093, effective August 12, 1986; amended in R86-19 at 10 III. Reg.

20702, effective December 2, 1986; amended in R86-28 at 11 III. Reg. 6121, effective March 24, 1987; amended in R86-46 at 11 III. Reg. 13543, effective August 4, 1987; amended in R37-5 at 11 III. Reg. 19383, effective November 12, 1987; amended in R87-26 at 12 III. Reg. 2584, effective January 15, 1988; amended in R87-39 at 12 III. Reg. 13069, effective July 29, 1988; amended in R88-16 at 13 III. Reg. 447, effective December 27, 1988; amended in R89-1 at 13 III. Reg. 18477, effective November 13, 1989; amended in R89-9 at 14 III. Reg. , effective amended in R90-2 at 14 III. Reg. , effective

Section 703.Appendix A Classification of Permit Modifications

Class Modifications

- A. General Permit Provisions
- Administrative and informational changes.
- Correction of typographical errors.
- Equipment replacement or upgrading with functionally equivalent components (e.g., pipes, valves, pumps, conveyors, controls).
 - 4. Changes in the frequency of or procedures for monitoring, reporting, sampling or maintenance activities by the permittee:
- 1 a. To provide for more frequent monitoring, reporting or maintenance.
- 2 b. Other changes.
 - 5. Schedule of compliance:
- 1* a. Changes in interim compliance dates, with prior approval of the Agency.

BOARD NOTE: "*" indicates that prior Agency approval is required.

- 3 b. Extension of final compliance date.
- 1* 6. Changes in expiration date of permit to allow earlier permit termination, with prior approval of the Agency.
- 1* 7. Changes in ownership or operational control of a facility, provided the procedures of Section 703.260(b) are followed.
 - B. General Facility Standards
 - 1. Changes to waste sampling or analysis methods:
- 1 a. To conform with Agency guidance or Board regulations.
- 2 b. Other changes.

- 2. Changes to analytical quality assurance/control plan:
- 1 a. To conform with agency guidance or regulations.
- 2 b. Other changes.
- 1 3. Changes in procedures for maintaining the operating record.
- 2 4. Changes in frequency or content of inspection schedules.
 - 5. Changes in the training plan:
- 2 a. That affect the type or decrease the amount of training given to employees.
- 1 b. Other changes.
 - 6. Contingency plan:
- 2 a. Changes in emergency procedures (i.e., spill or release response procedures).
- b. Replacement with functionally equivalent equipment, upgrade or relocate emergency equipment listed.
- 2 c. Removal of equipment from emergency equipment list.
- d. Changes in name, address or phone number of coordinators or other persons or agencies identified in the plan.

Note: When a permit modification (such as introduction of a new unit) requires a change in facility plans or other general facility standards, that change must be reviewed under the same procedures as the permit modification.

C. Groundwater Protection

- 1. Changes to wells:
- 2 a. Changes in the number, location, depth or design of upgradient or downgradient wells of permitted groundwater monitoring system.
- 1 b. Replacement of an existing well that has been damaged or rendered inoperable, without change to location, design or depth of the well.
- 1* 2. Changes in groundwater sampling or analysis procedures or monitoring schedule, with prior approval of the Agency.
- 1* 3. Changes in statistical procedure for determining whether a statistically significant change in groundwater quality between upgradient and downgradient wells has occurred, with prior

approval of the Agency.

- 2* 4. Changes in point of compliance.
 - 5. Changes in indicator parameters, hazardous constituents or concentration limits (including ACLs (Alternate Concentration Limits)):
- 3 a. As specified in the groundwater protection standard.
- 2 b. As specified in the detection monitoring program.
- 2 6. Changes to a detection monitoring program as required by 35 Ill. Adm. Code 724.198(j), unless otherwise specified in this Appendix.
 - 7. Compliance monitoring program:
- 3 a. Addition of compliance monitoring program as required by 35 Ill. Adm. Code 724.198(h)(4) and 724.199.
- 2 b. Changes to a compliance monitoring program as required by 35 Ill. Adm. Code 724.199(k), unless otherwise specified in this Appendix.
 - 8. Corrective action program:
- 3 a. Addition of a corrective action program as required by 35 Ill. Adm. Code 724.199(i)(2) and 724.200.
- b. Changes to a corrective action program as required by 35 Ill. Adm. Code 724.200(h), unless otherwise specified in this Appendix.

D. Closure

- 1. Changes to the closure plan:
- 1* a. Changes in estimate of maximum extent of operations or maximum inventory of waste on-site at any time during the active life of the facility, with prior approval of the Agency.
- 1* b. Changes in the closure schedule for any unit, changes in the final closure schedule for the facility or extension of the closure period, with prior approval of the Agency.
- 1* c. Changes in the expected year of final closure, where other permit conditions are not changed, with prior approval of the Agency.
- 1* d. Changes in procedures for decontamination of facility equipment or structures, with prior approval of the Agency.

- 2 e. Changes in approved closure plan resulting from unexpected events occurring during partial or final closure, unless otherwise specified in this Appendix.
- f. Extension of the closure period to allow a landfill, surface impoundment or land treatment unit to receive non-hazardous wastes after final receipt of hazardous wastes under 35 Ill. Adm. Code 724.213(d) or (e).
- 3 2. Creation of a new landfill unit as part of closure.
 - 3. Addition of the following new units to be used temporarily for closure activities:
- 3 a. Surface impoundments.
- 3 b. Incinerators.
- 3 c. Waste piles that do not comply with 35 Ill. Adm. Code 724.350(c).
- d. Waste piles that comply with 35 Ill. Adm. Code 724.350(c).
- 2 e. Tanks or containers (other than specified below).
- 1* f. Tanks used for neutralization, dewatering, phase separation or component separation, with prior approval of the Agency.

E. Post-Closure

- 1 1. Changes in name, address or phone number of contact in post-closure plan.
- 2 2. Extension of post-closure care period.
- 3 Reduction in the post-closure care period.
- 1 4. Changes to the expected year of final closure, where other permit conditions are not changed.
- 2 5. Changes in post-closure plan necessitated by events occurring during the active life of the facility, including partial and final closure.

F. Containers

- 1. Modification or addition of container units:
- a. Resulting in greater than 25% increase in the facility's container storage capacity, except as provided in F(1)(c) and F(4)(a).
- 2 b. Resulting in up to 25% increase in the facility's container storage capacity, except as provided in F(1)(c) and

F(4)(a).

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c. Or treatment processes necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, with prior approval of the Agency. This modification may also involve the addition of new waste codes or narrative description of wastes. It is not applicable to dioxincontaining wastes (FO20, FO21, FO22, FO23, FO26, FO27 and FO28).

2.

a. Modification of a container unit without increasing the capacity of the unit.

b. Addition of a roof to a container unit without alteration of the containment system.

- 3. Storage of different wastes in containers, except as provided in F(4):
 - a. That require additional or different management practices from those authorized in the permit.
 - b. That do not require additional or different management practices from those authorized in the permit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

- 4. Storage or treatment of different wastes in containers:
- That require addition of units or change in treatment process or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108. It is not applicable to dioxincontaining wastes (FO20, FO21, FO22, FO23, FO26, FO27 and FO28).
- 1 b. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification

is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027 and F028).

5. Other changes in container management practices (e.g., aisle space; types of containers; segregation).

G. Tanks

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- Modification or addition of tank units resulting in greater than 25% increase in the facility's tank capacity, except as provided in paragraphs G(1)(c), G(1)(d) and G(1)(e).
- 2 b. Modification or addition of tank units resulting in up to 25% increase in the facility's tank capacity, except as provided in paragraphs G(1)(d) and G(1)(e).
 - c. Addition of a new tank that will operate for more than 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation or component separation.
- d. After prior approval of the Agency, addition of a new tank that will operate for up to 90 days using any of the following physical or chemical treatment technologies: neutralization, dewatering, phase separation or component separation.
- e. Modification or addition of tank units or treatment processes that are necessary to treat wastes that are restricted from land disposal to meet some or all of the applicable treatment standards or to treat wastes to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, with prior approval of the Agency. This modification may also involve the addition of new waste codes. It is not applicable to dioxin-containing wastes (FO20, FO21, FO22, FO23, FO26, FO27 and FO28).
- 2 2. Modification of a tank unit or secondary containment system without increasing the capacity of the unit.
- Replacement of a tank with a tank that meets the same design standards and has a capacity within +/- 10% of the replaced tank provided:
 - a. The capacity difference is no more than 1500 gallons,
 - b. The facility's permitted tank capacity is not increased and
 - c. The replacement tank meets the same conditions in the

permit.

- 2 4. Modification of a tank management practice.
 - 5. Management of different wastes in tanks:
- 3 a. That require additional or different management practices, tank design, different fire protection specifications or significantly different tank treatment process from that authorized in the permit, except as provided in paragraph G(5)(c).
- 2 b. That do not require additional or different management practices, tank design, different fire protection specification or significantly different tank treatment process than authorized in the permit, except as provided in paragraph G(5)(d).

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

- c. That require addition of units or change in treatment processes or management standards, provided that the wastes are restricted from land disposal and are to be treated to meet some or all of the applicable treatment standards, or that are to be treated to satisfy (in whole or in part) the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108. The modification is not applicable to dioxin-containing wastes (FO20, FO21, FO22, FO23, FO26, FO27 and FO28).
- 1 d. That do not require the addition of units or a change in the treatment process or management standards, and provided that the units have previously received wastes of the same type (e.g., incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027 and F028).
 - H. Surface Impoundments

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- 1. Modification or addition of surface impoundment units that result in increasing the facility's surface impoundment storage or treatment capacity.
- 3 2. Replacement of a surface impoundment unit.
- 2 3. Modification of a surface impoundment unit without increasing the facility's surface impoundment storage or treatment capacity and without modifying the unit's liner, leak detection system or leachate collection system.

- 2 4. Modification of a surface impoundment management practice.
 - 5. Treatment, storage or disposal of different wastes in surface impoundments:
- 3 a. That require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.

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b. That do not require additional or different management practices or different design of the liner or leak detection system than authorized in the permit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

- c. That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit" contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, and provided that the unit meets the minimum technological reguirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105. This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027 and F028).
- 1 d. That are residues from wastewater treatment or incineration, provided the disposal occurs in a unit that meets the minimum technological reguirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105, and provided further that the surface impoundment has previously received wastes of the same type (for example, incinerator scrubber water). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027 and F028).
 - I. Enclosed Waste Piles. For all waste piles, except those complying with 35 Ill. Adm. Code 724.350(c), modifications are treated the same as for a landfill. The following modifications are applicable only to waste piles complying with 35 Ill. Adm. Code 724.350(c).
 - 1. Modification or addition of waste pile units:
- 3 a. Resulting in greater than 25% increase in the facility's waste pile storage or treatment capacity.
- 2 b. Resulting in up to 25% increase in the facility's waste pile storage or treatment capacity.
- 2 2. Modification of waste pile unit without increasing the capacity of the unit.

- Replacement of a waste pile unit with another waste pile unit of the same design and capacity and meeting all waste pile conditions in the permit.
- 2 4. Modification of a waste pile management practice.
 - 5. Storage or treatment of different wastes in waste piles:
- 3 a. That require additional or different management practices or different design of the unit.
- 2 b. That do not require additional or different management practices or different design of the unit.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

- J. Landfills and Unenclosed Waste Piles
- Modification or addition of landfill units that result in increasing the facility's disposal capacity.
- 3 2. Replacement of a landfill.
- Addition or modification of a liner, leachate collection system, leachate detection system, run-off control or final cover system.
- Modification of a landfill unit without changing a liner, leachate collection system, leachate detection system, run-off control or final cover system.
- 2 5. Modification of a landfill management practice.
 - 6. Landfill different wastes:
- 3 a. That require additional or different management practices, different design of the liner, leachate collection system or leachate detection system.
- 2 b. That do not require additional or different management practices, different design of the liner, leachate collection system or leachate detection system.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

That are wastes restricted from land disposal that meet the applicable treatment standards or that are treated to satisfy the standard of "use of practically available technology that yields the greatest environmental benefit"

contained in 40 CFR 268.8(a)(2)(ii), incorporated by reference in 35 Ill. Adm. Code 728.108, and provided that the landfill unit meets the minimum technological reguirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105. This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027 and F028).

d. That are residues from wastewater treatment or incineration, provided the disposal occurs in a landfill unit that meets the minimum technological reguirements stated in 40 CFR 268.5(h)(2), incorporated by reference in 35 Ill. Adm. Code 728.105, and provided further that the landfill has previously received wastes of the same type (for example, incinerator ash). This modification is not applicable to dioxin-containing wastes (F020, F021, F022, F023, F026, F027 and F028).

K. Land Treatment

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- 3 l. Lateral expansion of or other modification of a land treatment unit to increase area extent.
- 2 2. Modification of run-on control system.
- Modify run-off control system.
- 2 4. Other modification of land treatment unit component specifications or standards required in permit.
 - 5. Management of different wastes in land treatment units:
- 3 a. That require a change in permit operating conditions or unit design specifications.
- 2 b. That do not require a change in permit operating conditions or unit design specifications.

Note: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

- 6. Modification of a land treatment unit management practice to:
- Increase rate or change method of waste application.
- Decrease rate of waste application.
- 7. Modification of a land treatment unit management practice to change measures of pH or moisture content or to enhance microbial or chemical reactions.
- 8. Modification of a land treatment unit management practice to grow food chain crops, to add to or replace existing permitted

crops with different food chain crops or to modify operating plans for distribution of animal feeds resulting from such crops.

- 9. Modification of operating practice due to detection of releases from the land treatment unit pursuant to 35 Ill. Adm. Code 724.378(g)(2).
- 10. Changes in the unsaturated zone monitoring system resulting in a change to the location, depth, number of sampling points or replace unsaturated zone monitoring devices or components of devices with devices or components that have specifications different from permit requirements.
- 2 11. Changes in the unsaturated zone monitoring system that do not result in a change to the location, depth, number of sampling points, or that replace unsaturated zone monitoring devices or components of devices with devices or components having specifications different from permit requirements.
- 2 12. Changes in background values for hazardous constituents in soil and soil-pore liquid.
- 2 13. Changes in sampling, analysis or statistical procedure.
- 2 14. Changes in land treatment demonstration program prior to or during the demonstration.
- 1* 15. Changes in any condition specified in the permit for a land treatment unit to reflect results of the land treatment demonstration, provided performance standards are met, and the Agency's prior approval has been received.
- 1* 16. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, provided the conditions for the second demonstration are substantially the same as the conditions for the first demonstration and have received the prior approval of the Agency.
- 17. Changes to allow a second land treatment demonstration to be conducted when the results of the first demonstration have not shown the conditions under which the wastes can be treated completely, where the conditions for the second demonstration are not substantially the same as the conditions for the first demonstration.
- 2 18. Changes in vegetative cover requirements for closure.

Incinerators

3 1. Changes to increase by more than 25% any of the following limits authorized in the permit: A thermal feed rate limit, a waste

feed rate limit or an organic chlorine feed rate limit. The Agency shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.

- 2 2. Changes to increase by up to 25% any of the following limits authorized in the permit: A thermal feed rate limit, a waste feed limit or an organic chlorine feed rate limit. The Agency shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.
- 3. Modification of an incinerator unit by changing the internal size or geometry of the primary or secondary combustion units, by adding a primary or secondary combustion unit, by substantially changing the design of any component used to remove HCl or particulates from the combustion gases or by changing other features of the incinerator that could affect its capability to meet the regulatory performance standards. The Agency shall require a new trial burn to substantiate compliance with the regulatory performance standards, unless this demonstration can be made through other means.
- 4. Modification of an incinerator unit in a manner that will not likely affect the capability of the unit to meet the regulatory performance standards but which will change the operating conditions or monitoring requirements specified in the permit. The Agency may require a new trial burn to demonstrate compliance with the regulatory performance standards.
 - 5. Operating requirements:

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- a. Modification of the limits specified in the permit for minimum combustion gas temperature, minimum combustion gas residence time or oxygen concentration in the secondary combustion chamber. The Agency shall require a new trial burn to substantiate compliance with the regulatory performance standards unless this demonstration can be made through other means.
- b. Modification of any stack gas emission limits specified in the permit, or modification of any conditions in the permit concerning emergency shutdown or automatic waste feed cutoff procedures or controls.
 - c. Modification of any other operating condition or any inspection or recordkeeping requirement specified in the permit.
 - 6. Incineration of different wastes:
- a. If the waste contains a POHC that is more difficult to incinerate than authorized by the permit or if incineration of the waste requires compliance with different regulatory

performance standards than specified in the permit, the Agency shall require a new trial burn to substantiate compliance with the regulatory performance standards, unless this demonstration can be made through other means.

b. If the waste does not contain a POHC that is more difficult to incinerate than authorized by the permit and if incineration of the waste does not require compliance with different regulatory performance standards than specified in the permit.

BOARD NOTE: See Section 703.280(g) for modification procedures to be used for the management of newly listed or identified wastes.

7. Shakedown and trial burn:

- a. Modification of the trial burn plan or any of the permit conditions applicable during the shakedown period for determining operational readiness after construction, the trial burn period or the period immediately following the trial burn.
- 1* b. Authorization of up to an additional 720 hours of waste incineration during the shakedown period for determining operational readiness after construction, with the prior approval of the Agency.
- 1* c. Changes in the operating requirements set in the permit for conducting a trial burn, provided the change is minor and has received the prior approval of the Agency.
- d. Changes in the ranges of the operating requirements set in the permit to reflect the results of the trial burn, provided the change is minor and has received the prior approval of the Agency.
- 8. Substitution of an alternate type of fuel that is not specified in the permit.

BOARD NOTE: Derived from 40 CFR 270.42, Appendix I, as adopted at 53 Fed. Reg. 37934, September 28, 1988.

(Source: Amended at 14 Ill. Reg. , effective

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

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 721 IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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Thereof

Appendix J Method of Analysis for Chlorinated Dibenzo-p-Dioxins and Dibenzofurans

Appendix Z Table to Section 721.102

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1988 Supp., ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 III. Reg. 9781, effective as noted in 35 III. Adm. Code 700.106; amended and codified in R31-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-18, 51 PCB 31, at 7 III. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, at 7 Ill. Reg. 13999, effective October 12, 1983; amended in R84-34, 61 PCB 247, at 8 III. Reg. 24562, effective December 11, 1984; amended in R84-9, at 9 III. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 III. Reg. 998, effective January 2, 1986; amended in R85-2 at 10 Ill. Reg. 8112, effective May 2, 1986; amended in R86-1 at 10 Ill. Reg. 14002, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20647, effective December 2, 1986; amended in R86-28 at 11 III. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 III. Reg. 13466, effective August 4, 1987; amended in R87-32 at 11 Ill. Reg. 16698, effective September 30, 1987; amended in R87-5 at 11 III. Reg. 19303, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2456, effective January 15, 1988; amended in R87-30 at 12 Ill. Reg. 12070, effective July 12, 1988; amended in R87-39 at 12 III. Reg. 13006, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 382, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18300, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. effective

SUBPART A: GENERAL PROVISIONS

Section 721.103 Definition of Hazardous Waste

- a) A solid waste, as defined in Section 721.102, is a hazardous waste if:
 - 1) It is not excluded from regulation as a hazardous waste under Section 721.104(b); and
 - It meets any of the following criteria;
 - A) It exhibits any of the characteristics of hazardous waste identified in Subpart C. Except that any mixture of a waste from the extraction, beneficiation or processing of ores or minerals excluded under Section 721.104(b)(7) and any other solid waste exhibiting a characteristic of hazardous waste under Subpart C is a hazardous waste only: if it exhibits a characteristic that would not have been exhibited by the excluded waste alone if such mixture had not occurred; or, if it continues to exhibit any of the characteristics exhibited by the non-excluded wastes prior to mixture. Further, for the purposes of applying the EP toxicity (extraction procedure toxicity)

characteristic to such mixtures, the mixture is also a nazardous waste: if it exceeds the maximum concentration for any contaminant listed in Section 721.124 that would not have been exceeded by the excluded waste alone if the mixture had not occurred; or, if it continues to exceed the maximum concentration for any contaminant exceeded by the nonexempt waste prior to mixture.

- B) It is listed in Subpart D and has not been excluded from the lists in Subpart D under 35 Ill. Adm. Code 720.120 and 720.122.
- C) It is a mixture of a solid waste and a hazardous waste that is listed in Subpart D solely because it exhibits one or more of the characteristics of hazardous waste identified in Subpart C, unless the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C, or unless the solid waste: is excluded from regulation under Section 721.104(b)(7); and, the resultant mixture no longer exhibits any characteristic of hazardous waste identified in Subpart C for which the hazardous waste listed in Subpart D was listed.
- D) It is a mixture of solid waste and one or more hazardous wastes listed in Subpart D and has not been excluded from this paragraph under 35 Ill. Adm. Code 720.120 and 720.122; however, the following mixtures of solid wastes and hazardous wastes listed in Subpart D are not hazardous wastes (except by application of subsection (a)(2)(A) or (B)) if the generator can demonstrate that the mixture consists of wastewater the discharge of which is subject to regulation under either 35 Ill. Adm. Code 309 or 310 (including wastewater at facilities which have eliminated the discharge of wastewater) and;
 - i) One or more of the following spent solvents listed in Section 721.131 carbon tetrachloride, tetrachloroethylene, trichloroethylene provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 1 part per million; or
 - ii) One or more of the following spent solvents listed in Section 721.131 methylene chloride, 1,1,1 trichloroethane, chlorobenzene, o-dichlorobenzene, cresols, cresylic acid, nitrobenzene, toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, spent chlorofluorocarbon solvents provided that the maximum total weekly usage of these solvents (other than the amounts that can be demonstrated not to be discharged to wastewater) divided by the average

- weekly flow of wastewater into the headworks of the facility's wastewater treatment or pre-treatment system does not exceed 25 parts per million; or
- iii) One of the following wastes listed in Section 721.132 heat exchanger bundle cleaning sludge from the petroleum refining industry (EPA Hazardous Waste No. K050); or
- iv) A discharged commercial chemical product, or chemical intermediate listed in Section 721.133, arising from de minimis losses of these materials from manufacturing operations in which these materials are used as raw materials or are produced in the manufacturing process. For purposes of this subsection, "de minimis" losses include those from normal material handling operations (e.g., spills from the unloading or transfer of materials from bins or other containers, leaks from pipes, valves or other devices used to transfer materials); minor leaks of process equipment, storage tanks or containers; leaks from well-maintained pump packings and seals; sample purgings: relief device discharges: discharges from safety showers and rinsing and cleaning of personal safety equipment; and rinsate from empty containers or from containers that are rendered empty by that rinsing; or
- v) Wastewater resulting from laboratory operations containing toxic (T) wastes listed in Subpart D, provided that the annualized average flow of laboratory wastewater does not exceed one percent of total wastewater flow into the headworks of the facility's wastewater treatment or pre-treatment system, or provided that the wastes combined annualized average concentration does not exceed one part per million in the headworks of the facility's wastewater treatment or pre-treatment facility. Toxic (T) wastes used in laboratories that are demonstrated not to be discharged to wastewater are not to be included in this calculation.
- b) A solid waste which is not excluded from regulation under subsection (a)(1) becomes a hazardous waste when any of the following events occur:
 - 1) In the case of a waste listed in Subpart D, when the waste first meets the listing description set forth in Subpart D.
 - 2) In the case of a mixture of solid waste and one or more listed hazardous wastes, when a hazardous waste listed in Subpart D is first added to the solid waste.
 - 3) In the case of any other waste (including a waste mixture), when

the waste exhibits any of the characteristics identified in Subpart C.

- c) Unless and until it meets the criteria of subsection (d):
 - 1) A hazardous waste will remain a hazardous waste.
 - 2) Specific inclusions and exclusions
 - Except as otherwise provided in subsection (c)(2)(B), any solid waste generated from the treatment, storage or disposal of a hazardous waste, including any sludge, spill residue, ash, emission control dust or leachate (but not including precipitation run-off), is a hazardous waste. (However, materials that are reclaimed from solid wastes and that are used beneficially are not solid wastes and nence are not hazardous wastes under this provision unless the reclaimed material is burned for energy recovery or used in a manner constituting disposal.)
 - B) The following solid wastes are not hazardous even though they are generated from the treatment, storage or disposal of a hazardous waste, unless they exhibit one or more of the characteristics of hazardous waste:
 - i) Waste pickle liquor sludge generated by lime stabilization of spent pickle liquor from the iron and steel industry (SIC Codes 331 and 332) (Standard Industrial Codes, as defined and incorporated by reference in 35 Ill. Adm. Code 720.110 and 720.111).
 - ii) Wastes from burning any of the materials exempted from regulation by Section 721.106(a)(3)(E),(F),(G),(H) or (I).
- d) Any solid waste described in subsection (c) is not a hazardous waste if it meets the following criteria:
 - 1) In the case of any solid waste, it does not exhibit any of the characteristics of hazardous waste identified in Subpart C.
 - 2) In the case of a waste which is a listed waste under Subpart D, contains a waste listed under Subpart D or is derived from a waste listed in Subpart D, it also has been excluded from subsection (c) under 35 Ill. Adm. Code 720.120 and 720.122.

(Source: Amended at 14 III. Reg. , effective

Section 721.104 Exclusions

- a) Materials which are not solid wastes. The following materials are not solid wastes for the purpose of this Part:
 - 1) Sewage:

- A) Domestic sewage; and
- B) Any mixture of domestic sewage and other waste that passes through a sewer system to publicly-owned treatment works for treatment. "Domestic sewage" means untreated sanitary wastes that pass through a sewer system.
- 2) Industrial wastewater discharges that are point source discharges with NPDES permits issued by the Agency pursuant to Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309.

BOARD NOTE: This exclusion applies only to the actual point source discharge. It does not exclude industrial wastewaters while they are being collected, stored or treated before discharge, nor does it exclude sludges that are generated by industrial wastewater treatment.

- 3) Irrigation return flows.
- 4) Source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)
- 5) Materials subjected to in-situ mining techniques which are not removed from the ground as part of the extraction process.
- Pulping liquors (i.e., black liquor) that are reclaimed in a pulping liquor recovery furnace and then reused in the pulping process, unless accumulated speculatively as defined in Section 721.101(c);
- 7) Spent sulfuric acid used to produce virgin sulfuric acid, unless it is accumulated speculatively as defined in Section 721.101(c).
- 8) Secondary materials that are reclaimed and returned to the original process or processes in which they were generated where they are reused in the production process, provided:
 - A) Only tank storage is involved, and the entire process through completion of reclamation is closed by being entirely connected with pipes or other comparable enclosed means of conveyance;
 - B) Reclamation does not involve controlled flame combustion (such as occurs in boilers, industrial furnaces or incinerators);
 - C) The secondary materials are never accumulated in such tanks for over twelve months without being reclaimed; and
 - D) The reclaimed material is not used to produce a fuel, or used to produce products that are used in a manner

constituting disposal.

- b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:
 - Household waste, including household waste that has been collected, transported, stored, treated, disposed, recovered (e.g., refuse-derived fuel) or reused. "Household waste" means any waste material (including garbage, trash and sanitary wastes in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, pionic grounds and day-use recreation areas). A resource recovery facility managing municipal solid waste shall not be deemed to be treating, storing, disposing of or otherwise managing hazardous wastes for the purposes of regulation under this Part, if such facility:
 - A) Receives and burns only:
 - i) Household waste (from single and multiple dwellings, hotels, motels and other residential sources) and
 - ii) Solid waste from commercial or industrial sources that does not contain hazardous waste; and
 - B) Such facility does not accept hazardous waste and the owner or operator of such facility has established contractural requirements or other appropriate notification or inspection procedures to assure that hazardous wastes are not received at or burned in such facility.
 - 2) Solid wastes generated by any of the following and which are returned to the soil as fertilizers:
 - A) The growing and harvesting of agricultural crops.
 - B) The raising of animals, including animal manures.
 - 3) Mining overburden returned to the mine site.
 - 4) Fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels.
 - 5) Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.
 - 6) Chromium wastes:
 - A) Wastes which fail the test for the characteristic of EP toxicity (Section 721.124 and Appendix B) because chromium is present or are listed in Subpart D due to the presence of chromium, which do not fail the test for the

characteristic of EP toxicity for any other constituent or are not listed due to the presence of any other constituent, and which do not fail the test for any other characteristic, if it is shown by a waste generator or by waste generators that:

- i) The chromium in the waste is exclusively (or nearly exclusively) trivalent chromium; and
- ii) The waste is generated from an industrial process which uses trivalent chromium exclusively (or nearly exclusively) and the process does not generate hexavalent chromium; and
- iii) The waste is typically and frequently managed in nonoxidizing environments.
- B) Specific wastes which meet the standard in subsections (b)(6)(A)(i), (ii) and (iii) (so long as they do not fail the test for the characteristic of EP toxicity, and do not fail the test for any other characteristic) are
 - i) Chrome (blue) trimmings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - ii) Chrome (blue) shavings generated by the following subcategories of the leather tanning and finishing industry; hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - iii) Buffing dust generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamnouse; through-the-blue.
 - iv) Sewer screenings generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - v) Wastewater treatment sludges generated by the following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/cnrome tan/retan/wet finish; retan/wet finish; no beamhouse; through-the-blue; and shearling.
 - vi) Wastewater treatment sludges generated by the

- following subcategories of the leather tanning and finishing industry: hair pulp/chrome tan/retan/wet finish; hair save/chrome tan/retan/wet finish; and through-the-blue.
- vii) Waste scrap leather from the leather tanning industry, the shoe manufacturing industry, and other leather product manufacturing industries.
- viii) Wastewater treatment sludges from the production of titanium dioxide pigment using chromium-bearing ores by the chloride process.
- Solid waste from the extraction, beneficiation and processing of ores and minerals (including coal), including phosphate rock and overburden from the mining of uranium ore. For purposes of this subsection, beneficiation of ores and minerals is restricted to the following activities: crushing, grinding, washing, dissolution, crystallization, filtration, sorting, sizing, drying, sintering, pelletizing, briquetting, calcining to remove water or carbon dioxide, roasting in preparation for leaching (except where the roasting/leaching sequence produces a final or intermediate product that does not undergo further beneficiation or processing), gravity concentration, magnetic separation, electrostatic separation, floatation, ion exchange, solvent extraction, electrowinning, precipitation, amalgamation, and heap, dump, vat tank and in situ leaching. For the purposes of this subsection, solid waste from the processing of ores and minerals -dees net includes only:
 - A) Acid plant blowdown slurry or sludge resulting from the thickening of blowdown slurry from primary copper production;
 - B) Surface impoundment solids contained in and dredged from surface impoundments at primary lead smelting facilities;
 - 6) After June 30, 1990, sindge from treatment of process wastewater or acid plant blowdown from primary zine production;
 - D) Spent potliners from primary aluminum reduction;
 - E) Emission control dust or sludge from ferrochromiumsilicon production: and
 - F) Emission control dust or sludge from ferrochromium production.
 - A) The following solid wastes from the processing of ores and minerals, which are retained within this exclusion:
 - i) Slag from primary copper smelting;

- ii) Slag from primary lead smelting;
- <u>iii) Req and brown muds from bauxite refining;</u>
- iv) Phosphogypsum from phosphoric acid production;
- v) Slag from elemental phosphorus production; and
- The following solid wastes from the processing of ores and minerals, which are conditionally retained within this exclusion, pending collection and evaluation of additional data:
 - i) Roast/leach one residue from primary chromite
 production;
 - ii) Gasifier ash from coal gasification;
 - <u>iii) Process wastewater from coal gasification;</u>
 - iv) Slag tailings from primary copper smelting;
 - v) Calcium sulfate wastewater treatment plant sludge from primary copper smelting/refining;
 - vi) Furnace off-gas solids from elemental phosphorus production;
 - vii) Fluorogypsum from hydrofluoric acid production;
 - viii) Process wastewater from hydrofluoric acid production;
 - ix) Air pollution control dust/sludge from iron blast furnaces;
 - x) Iron blast furnace slag;
 - xi) Process wastewater from primary lead production;
 - xii) Air pollution control dust/sludge from lightweight aggregate production;
 - xiii) Process wastewater from primary magnesium processing
 by the anhydrous process;
 - xiv) Process wastewater from phosphoric acid production;
 - xv) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
 - xvi) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production:

- xvii) Sulfate processing waste acids from titanium dioxide
 production;
- xviii) Sulfate processing waste solids from titanium dioxide
 production;
 - <u>xix)</u> Chloride processing waste solids from titanium tetrachioride production; and,
 - xx) Slag from primary zinc smelting.
- 8) Cement kiln dust waste.
- 9) Solid waste which consists of discarded wood or wood products which fails the test for the characteristic of EP toxicity and which is not a hazardous waste for any other reason if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.
- hazardous wastes which are exempted from certain regulations. A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste-treatment manufacturing unit, is not subject to regulation under 35 Ill. Adm. Code 702, 703, 705 and 722 through 725 and 728 or to the notification requirements of Section 3010 of RCRA until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials.

d) Samples

- 1) Except as provided in subsection (d)(2), a sample of solid waste or a sample of water, soil or air, which is collected for the sole purpose of testing to determine its characteristics or composition, is not subject to any requirements of this Part or 35 Ill. Adm. Code 702, 703, 705 and 722 through 728. The sample qualifies when:
 - A) The sample is being transported to a laboratory for the purpose of testing; or
 - B) The sample is being transported back to the sample collector after testing; or
 - C) The sample is being stored by the sample collector before transport to a laboratory for testing; or
 - D) The sample is being stored in a laboratory before testing; or
 - E) The sample is being stored in a laboratory for testing but

before it is returned to the sample collector; or

- F) The sample is being stored temporarily in the laboratory after testing for a specific purpose (for example, until conclusion of a court case or enforcement action where further testing of the sample may be necessary).
- In order to qualify for the exemption in subsection (d)(1)(A) and (B), a sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must:
 - A) Comply with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS) or any other applicable shipping requirements; or
 - B) Comply with the following requirements if the sample collector determines that DOT, USPS or other shipping requirements do not apply to the snipment of the sample:
 - i) Assure that the following information accompanies the sample: The sample collector's name, mailing address and telephone number; the laboratory's name, mailing address and telephone number; the quantity of the sample; the date of the shipment; and a description of the sample.
 - ii) Package the sample so that it does not leak, spill or vaporize from its packaging.
- This exemption does not apply if the laboratory determines that the waste is hazardous but the laboratory is no longer meeting any of the conditions stated in subsection (d)(1).
- e) Treatability study samples.
 - 1) Except as is provided in subsection (e)(2), persons who generate or collect samples for the purpose of conducting treatability studies, as defined in 35 Ill. Adm. Code 720.110, are not subject to any requirement of 35 Ill. Adm. Code 721 through 723 or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act. Nor are such samples included in the quantity determinations of Section 721.105 and 35 Ill. Adm. Code 722.134(d) when:
 - A) The sample is being collected and prepared for transportation by the generator or sample collector; or,
 - B) The sample is being accumulated or stored by the generator or sample collector prior to transportation to a laboratory or testing facility; or
 - The sample is being transported to the laboratory on testing facility for the purpose of conducting a treatability study.

- 2) The exemption in subsection (e)(1) is applicable to samples of hazardous waste being collected and shipped for the purpose of conducing treatability studies provided that:
 - A) The generator or sample collector uses (in "treatability studies") no more than 1000 kg of any non-acute hazardous waste, 1 kg of acute hazardous waste or 250 kg of soils, water or debris contaminated with acute hazardous waste for each process being evaluated for each generated wastestream; and
 - B) The mass of each shipment does not exceed 1000 kg of non-acute hazardous waste, 1 kg of acute hazardous waste or 250 kg of soils, water or debris contaminated with acute hazardous waste; and
 - C) The sample must be packaged so that it does not leak, spill or vaporize from its packaging during shipment and the requirements of subsections (i) or (ii) are met.
 - i) The transportation of each sample shipment complies with U.S. Department of Transportation (DOT), U.S. Postal Service (USPS) or any other applicable shipping requirements; or
 - ii) If the DOT, USPS or other shipping requirements do not apply to the shipment of the sample, the following information must accompany the sample: The name, mailing address and telephone number of the originator of the sample; the name, address and telephone number of the facility that will perform the treatability study; the quantity of the sample; the date of the shipment; and, a description of the sample, including its USEPA hazardous waste number.
 - D) The sample is shipped to a laboratory or testing facility which is exempt under subsection (f) or has an appropriate RCRA permit or interim status.
 - E) The generator or sample collector maintains the following records for a period ending 3 years after completion of the treatability study:
 - i) Copies of the shipping documents;
 - ii) A copy of the contract with the facility conducting the treatability study;
 - iii) Documentation showing: The amount of waste shipped under this exemption; the name, address and USEPA identification number of the laboratory or testing facility that received the waste; the date the shipment was made; and, whether or not unused samples

and residues were returned to the generator.

- F) The generator reports the information required in subsection (e)(2)(E)(iii) in its report under 35 Ill. Adm. Code 722.141.
- 3) The Agency may grant requests, on a case-by-case basis, for quantity limits in excess of those specified in subsection (e)(2)(A), for up to an additional 500 kg of any non-acute hazardous waste, 1 kg of acute hazardous waste and 250 kg of soils, water or debris contaminated with acute hazardous waste. to conduct further treatability study evaluation when: There has been an equipment or mechanical failure during the conduct of the treatability study; there is need to verify the results of a previously conducted treatability study; there is a need to study and analyze alternative techniques within a previously evaluated treatment process; or, there is a need to do further evaluation of an ongoing treatability study to determine final specifications for treatment. The additional quantities allowed are subject to all the provisions in subsections (e)(1) and (e)(2)(B) through (F). The generator or sample collector must apply to the Agency and provide in writing the following information:
 - A) The reason why the generator or sample collector requires additional quantity of sample for the treatability study evaluation and the additional quantity needed;
 - B) Documentation accounting for all samples of hazardous waste from the wastestream which have been sent for or undergone treatability studies, including the date each previous sample was shipped, the quantity of each previous shipment, the laboratory or testing facility to which it was shipped, what treatability study processes were conducted on each sample shipped, and the available results of each treatability study;
 - C) A description of the technical modifications or change in specifications which will be evaluated and the expected results;
 - D) If such further study is being required due to equipment or mechanical failure, the applicant must include information regarding the reason for the failure or breakdown and also include what procedures or equipment have been made to protect against further breakdowns; and,
 - E) Such other information as the Agency determines is necessary.
- 4) Final Agency determinations pursuant to this subsection may be appealed to the Board.
- f) Samples undergoing treatability studies at laboratories or testing

facilities. Samples undergoing treatability studies and the laboratory or testing facility conducting such treatability studies (to the extent such facilities are not otherwise subject to RCRA requirements) are not subject to any requirement of this Part, or of 35 Ill. Adm. Code 702, 703, 705, 722 through 726, and 728, or to the notification requirements of Section 3010 of the Resource Conservation and Recovery Act, provided that the requirements of subsections (f)(1) through (f)(11) are met. A mobile treatment unit may qualify as a testing facility subject to subsections (f)(1) through (f)(11). Where a group of mobile treatment units are located at the same site, the limitations specified in subsections (f)(1) through (f)(11) apply to the entire group of mobile treatment units collectively as if the group were one mobile treatment unit.

- 1) No less than 45 days before conducting treatability studies, the facility notifies the Agency in writing that it intends to conduct treatability studies under this subsection.
- 2) The laboratory or testing facility conducting the treatability study has a USEPA identification number.
- 3) No more than a total of 250 kg of "as neceived" hazardous waste is subjected to initiation of treatability studies in any single day. "As neceived" waste refers to the waste as neceived in the shipment from the generator or sample collector.
- 4) The quantity of "as received" hazardous waste stored at the facility for the purpose of evaluation in treatability studies does not exceed 1000 kg, the total of which can include 500 kg of soils, water or debris contaminated with acute hazardous waste or 1 kg of acute hazardous waste. This quantity limitation does not include:
 - A) Treatability study residues: and,
 - B) Treatment materials (including nonhazardous solid waste) added to "as received" hazardous waste.
- No more than 90 days have elapsed since the treatability study for the sample was completed, or no more than one year has elapsed since the generator or sample collector shipped the sample to the laboratory or testing facility, whichever date first occurs.
- 6) The treatability study does not involve the placement of hazardous waste on the land or open burning of hazardous waste.
- 7) The facility maintains records for 3 years following completion of each study that show compliance with the treatment rate limits and the storage time and quantity limits. The following specific information mus be included for each treatability study conducted:
 - A) The name, address and USEPA identification umber of the

generator or sample collector of each waste sample;

- B) The date the shipment was received;
- C) The quantity of waste accepted;
- D) The quantity of "as received" waste in storage each day;
- E) The date the treatment study was initiated and the amount of "as received" waste introduced to treatment each day;
- F) The date the treatability study was concluded;
- G) The date any unused sample or residues generated from the treatability study were returned to the generator or sample collector or, if sent to a designated facility, the name of the facility and the USEPA identification number.
- The facility keeps, on-site, a copy of the treatability study contract and all shipping papers associated with the transport of treatability study samples to and from the facility for a period ending 3 years from the completion date of each treatability study.
- 9) The facility prepares and submits a report to the Agency by March 15 of each year that estimates the number of studies and the amount of waste expected to be used in treatability studies during the current year, and includes the following information for the previous calendar year:
 - A) The name, address and USEPA identification number of the facility conducting the treatability studies;
 - B) The types (by process) of treatability studies conducted;
 - C) The names and addresses of persons for whom studies have been conducted (including their USEPA identification numbers);
 - D) The total quantity of waste in storage each day;
 - E) The quantity and types of waste subjected to treatability studies;
 - F) When each treatability study was conducted;
 - G) The final disposition of residues and unused sample from each treatability study;
- 10) The facility determines whether any unused sample or residues generated by the treatability study are hazardous waste under Section 721.303 and, if so, are subject to 35 [1]. Adm. Order 702, 703 and 721 the eight 720, unless the residues and until disamples are returned to the sample originator under the

subsection (e) exemption.

11) The facility notifies the Agency by letter when the facility is no longer planning to conduct any treatability studies at the site.

(Source: Amended at 14 Ill. Reg. , effective

SUBPART D: LISTS OF HAZARDOUS WASTE

Section 721.131 Hazardous Wastes From Nonspecific Sources

The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under $35\,\,\mathrm{Ill}$. Adm. Code $720.120\,$ and $720.122\,$ and listed in Appendix I.

EPA Hazardous Industry and Waste No. Hazardous Waste Hazard Code

The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons; all spent solvent mixtures and blends used in degreasing containing, before use, a total of ten percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in FOO2, FOO4 or FOO5; and still bottoms from the recovery of these spent solvents and spent solvent mixtures.

The following spent halogenated solvents:

tetrachloroethylene, methylene chloride, trichloroethylene,
1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2trifluoroethane, orthodichlorobenzene, trichlorofluoromethane
and 1,1,2-trichloroethane; all spent solvent mixtures and
blends containing, before use, a total of ten percent or more
(by volume) of one or more of the above halogenated solvents or
those solvents listed in FOO1, FOO4 or FOO5; and still bottoms
from the recovery of these spent solvents and spent solvent
mixtures.

The following spent non-halogenated solvents:

xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether,
methyl isobutyl ketone, n-butyl alcohol, cyclohexanone and
methanol; all spent solvent mixtures and blends containing,
before use, only the above spent non-halogenated solvents; and
all spent solvent mixtures and blends containing, before use,
one or more of the above non-halogenated solvents and a total
of ten percent or more (by volume) of one or more of those
solvents listed in FOO1, FOO2, FOO4 or FOO5; and still bottoms
from the recovery of these spent solvents and spent solvent
mixtures.

The following spent non-halogenated solvents: (T) cresols and cresylic acid and nitrobenzene; all spent solvent mixtures and blends containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in FOO1, FOO2 or

| F 005 | F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. The following spent non-halogenated solvents: T) | (1, |
|-------|---|-----|
| F 006 | toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol and 2-nitropropane; all spent solvent mixtures and blends, containing, before use, a total of ten percent or more (by volume) of one or more of the above non-halogenated solvents or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum. | (7) |
| F019 | Wastewater treatment sludges from the chemical | (T) |
| F007 | conversion coating of aluminum. Spent cyanide plating bath solutions from | (R, |
| | T) | () |
| F008 | electroplating operations. Plating bath residues from the bottom of T) | (R, |
| F009 | plating baths from electroplating operations where cyanides are used in the process. Spent stripping and cleaning bath solutions T) from electroplating operations where cyanides are used in the | (R, |
| F010 | process. Quenching bath residues from oil baths T) | (R, |
| F011 | from metal heat treating operations where cyanides are used in the process. Spent cyanide solutions from salt bath | (R, |
| F012 | T) pot cleaning from metal heat treating operations. Quenching wastewater treatment sludges from metal neat treating operations where cyanides are used in the | (T) |
| F020 | process. Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their | (H) |
| F021 | pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichloropheno).) Wastes (except wastewater and spent carbon from the production or manufact ring use (43 a reactant, chamical intermediate or component in a formulating process) of pentachlorocranol, or of | (H) |

| F022 | intermediates used to produce its derivatives. Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta- or hexachlorobenzenes under alkaline conditions. | (H) |
|-------------|---|------------|
| F023 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of | (+) |
| F024 | hexachlorophene from highly purified 2,4,5- trichlorophenol. Process wWastes including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout wastes, from the production of certain chlorinated aliphatic hydrocarbons-; having earbon content from one to five; utilizing-by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. (This listing does not include -light ends; spent filters and filter aids; spent dessicants; -wastewaters, wastewater treatment sludges, spent catalysts and wastes listed in this Section or Section 721.132.) | (T) |
| <u>F025</u> | Condensed light ends, spent filters and filter aids, and spent dessicant wastes from the production of certain chlorinated aliphatic hydrocarbons by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution. | <u>(T)</u> |
| F026 | Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate or component in a formulating process) of tetra-, penta- or hexachlorobenzene under alkaline conditions. | (H) |
| F027 | Discarded unused formulations containing tri-, tetra- or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component). | (H) |
| F028 | Residues resulting from the incineration or thermal treatment of soil contaminated with hazardous waste numbers F020, F021, F022, F023, F026 and F027. | (T) |

(Board Note: The primary hazardous properties of these materials have been indicated by the letters T (Toxicity), R (Reactivity), I (Ignitability), and C (Corrosivity). The letter H indicates Acute Hazardous Waste.)

(Source: Amended at 14 Ill. Reg. , effective

Section 721.132 Hazardous Waste from Specific Sources

The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under 35 III. Adm. Code 720.120 and 720.122 and listed in Appendix I.

EPA Hazardous Waste No. Industry and Hazardous Waste

Hazard Code

Wood Preservation:

K001 Bottom sediment sludge from the treatment (T) of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.

Inorganic Pigments:

| K002 | Wastewater treatment sludge from the production of chrome yellow and orange pigments. | (T) |
|------|--|-----|
| K003 | Wastewater treatment sludge from the production of molybdate orange pigments. | (T) |
| K004 | Wastewater treatment sludge from the production of zinc yellow pigments. | (T) |
| K005 | Wastewater treatment sludge from the | (T) |
| K006 | production of chrome green pigments. Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and | (T) |
| K007 | hydrated). Wastewater treatment sludge from the production of iron blue pigments. | (T) |
| K008 | Oven residue from the production of chrome oxide green pigments. | (T) |

Organic Chemicals:

| K009 | Distillation bottoms from the production of | (T) |
|------|---|-------|
| K010 | acetaldehyde from ethylene. Distillation side cuts from the production of acetaldehyde from ethylene. | (T) |
| K011 | Bottom stream from the wastewater stripper in the production of acrylonitrile. | (R,T) |
| K013 | Bottom stream from the acetronitrile column | (T) |
| K014 | <pre>in the production of acrylonitrile. Bottoms from the acetontrile purification column in the production of acrylonitrile.</pre> | (T) |
| K015 | Still bottoms from the distillation of benzyl chloride. | (T) |
| K016 | Heavy ends or distillation residues from the | (T) |
| K017 | production of carbon tetrachloride. Heavy ends (styll bottoms) from the pullfination column in the production of epichlorohydrin. | (T) |

| K018 | Heavy ends from the fractionation column in ethyl chloride production. | (Ť) |
|------|--|-----------|
| К019 | Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production. | (T) |
| K020 | Heavy ends from the distillation of vinyl | (T) |
| K021 | chloride in vinyl chloride monomer production. Aqueous spent antimony catalyst waste from | (T) |
| К022 | fluoromethanes production. Distillation bottom tars from the production | (T) |
| K023 | of phenol/acetone from cumene. Distillation light ends from the production of phthalic anhydride from naphthalene. | (T) |
| K024 | Distillation bottoms from the production of phthalic anhydride from naphthalene. | (T) |
| K093 | Distillation light ends from the production of phthalic anhydride from ontho-xylene. | (T) |
| K094 | Distillation bottoms from the production of phthalic anhydride from ortho-xylene. | (T) |
| K025 | Distillation bottoms from the production of nitrobenzene by the nitration of benzene. | (T) |
| K026 | Stripping still tails from the production of methyl ethyl pyridines. | (T) |
| K027 | Centrifuge and distillation residues from toluene diisocyanate production. | (R,T) |
| K028 | Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane. | (T) |
| K029 | Waste from the product stream stripper in the production of 1,1,1-trichloroethane. | (T) |
| K095 | Distillation bottoms from the production of 1,1,1-trichloroethane. | (T) |
| KC96 | Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane. | (T) |
| КЭ30 | Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene. | (T) |
| K083 | Distillation bottoms from aniline production. | (T) |
| K103 | Process residues from aniline extraction from the production of aniline. | (T) |
| K104 | Combined wastewater streams generated from nitrobenzene/aniline production. | (T) |
| K035 | Distillation or fractionation column bottoms from the production of chlorobenzenes. | |
| K105 | Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes. | (T) |
| K111 | Product wastewaters from the production of dinitrotoluene via nitration of toluene. | (C,T) |
| K112 | Reaction by-product water from the drying column in the production of toluenediamine via hydrogenation or dinitrotoluene. | (T) F |
| K113 | Condensed liquid light ends from the purification of toluenediamine in the production of | (T) |
| K114 | toluenediamine via hydrogenation of dinitroluene. Vicinals from the purification of toluene- diamine in the production of toluenediamine via hydrogenation of dinitrotolune. | (T) of |

| K115 | Heavy ends from the purification of toluenediamine via hydroger of dinitrotoluene. | (T) nation |
|--|--|---|
| K116 | Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenati toluenediamine. | (T) on of |
| K117 | Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene. | (T) |
| K118 | Spent adsorbent solids from purification of ethylene dibromide via bromination of ethene. | (T) |
| K136 | Still bottoms from the purification of ethylene dibromide via bromination of ethene. | (T) |
| | Inorganic Chemicals: | |
| K071 | Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used. | (T) |
| K073 | Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production. | (T) |
| K106 | Wastewater treatment sludge from the mercury cell process in chlorine production. | (T) |
| | | |
| | Pesticides: | |
| K031 | By-product salts generated in the production | (T) |
| K031 K032 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the | (T) (T) |
| | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the | (T) (T) |
| K032 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane Filter solids from the filtration of | (T) (T) |
| K032 K033 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane | (T) (T) |
| K032 K033 K034 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the | (T) (T) (T) |
| K032 K033 K034 K097 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the production of creosote. Still bottoms from toluene reclamation | (T) (T) · (T) (T) |
| K032 K033 K034 K097 K035 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the production of creosote. Still bottoms from toluene reclamation distillation in the production of disulfoton. Wastewater treatment sludges from the | (T) (T) (T) (T) |
| K032 K033 K034 K097 K035 K036 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the production of creosote. Still bottoms from toluene reclamation distillation in the production of disulfoton. Wastewater treatment sludges from the production of disulfoton. Wastewater from the washing and stripping of | (T) (T) (T) (T) (T) |
| K032 K033 K034 K097 K035 K036 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane. Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the production of creosote. Still bottoms from toluene reclamation distillation in the production of disulfoton. Wastewater treatment sludges from the production of disulfoton. Wastewater from the washing and stripping of phorate production. Filter cake from the filtration of | (T) (T) (T) (T) (T) (T) (T) |
| K032 K033 K034 K097 K035 K036 K037 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the production of creosote. Still bottoms from toluene reclamation distillation in the production of disulfoton. Wastewater treatment sludges from the production of disulfoton. Wastewater from the washing and stripping of phorate production. Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. Wastewater treatment sludge from the | (T) (T) (T) (T) (T) (T) (T) |
| K032 K033 K034 K097 K035 K036 K037 K038 K039 | By-product salts generated in the production of MSMA and cacodylic acid. Wastewater treatment sludge from the production of chlordane. Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane. Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane. Wastewater treatment sludges generated in the production of creosote. Still bottoms from toluene reclamation distillation in the production of disulfoton. Wastewater treatment sludges from the production of disulfoton. Wastewater from the washing and stripping of phorate production. Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate. | (T) (T) (T) (T) (T) (T) (T) (T) |

| K042 | production of toxaphene. Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5- | (T) |
|-------------|--|------------|
| K043 | 7. 2,6-Dichlorophenol waste from the production | (T) |
| K099 | of 2,4-D. Untreated wastewater from the production | (7) |
| K123 | of 2,4-D. Process wastewater (including supernates, filtrates and washwaters) from the production of | (T) |
| K124 | ethylenebisdithiocarbamic acid and its salts. Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts. | (C,T) |
| K125 | Filtration, evaporation and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts | (T) |
| K126 | Baghouse dust and floor sweepings in milling and packaging operations from the production or formulation of | (T) |
| <u>K131</u> | ethylenebisditniocarbamic acid and its salts. Wastewater from the reactor and spent sulfuric acid from | (C,T) |
| <u>K132</u> | the acid dryer from the production of methyl bromide. Spent absorbent and wastewater separator solids from the production of methyl bromide. | <u>(T)</u> |
| | Explosives: | |
| K044 | Wastewater treatment sludges from the | (R) |
| K045 | manufacturing and processing of explosives. Spent carbon from the treatment of wastewater containing explosives. | (2) |
| K046 | Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating | (⊤) ∃ |
| K047 | compounds. Pink/red water from TNT operations. | (R) |
| | Petroleum Refining: | |
| K048 | Dissolved air flotation (DAF) float from the petroleum refining industry. | (T) |
| K049 | Slop oil emulsion solids from the petroleum refining industry. | (T) |
| K050 | Heat exchanger bundle cleaning sludge from the petroleum refining industry. | (T) |
| K051 | API separator sludge from the petroleum refining industry. | (T) |
| K052 | Tank bottoms (leaded) from the petroleum refining industry. | (T) |
| | Iron and Steel: | |
| K061 | Emission control dust/sludge from the primary | (T) |
| K062 | production of steel in electric furnaces. Spent pickle liquor generated by steel finishing operations of facilities within the iron and steel | (C,T) |

industry (SIC Codes 331 and 332) (as defined in 35 III. Adm. Code 720.110).

Primary Copper:

K064 Acid plant blowdown slurry or sludge resulting from the thickening of blowdown slurry from primary copper production.

Primary Lead:

K065 Surface impoundment solids contained in and dredged from (T) surface impoundments at primary lead smelting facilities.

Primary Zinc:

K066 After June 30, 1990, sludge from treatment of process (T) wastewater or acid plant blowdown from primary zinc production.

Primary Aluminum:

KO88 Spent potliners from primary aluminum reduction. (T)

Ferroalloys:

- K090 Emission control dust or sludge from ferrochromiumsilicon (T) production
- K091 Emission control dust or sludge from ferrochromium (T) production

Secondary Lead:

- K069 Emission control dust/sludge from secondary (T) lead smelting.
 K100 Waste leaching solution from acid leaching (T)
- K100 Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting.

Veterinary Pharmaceuticals:

- KO84 Wastewater treatment sludges generated (7) during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.
- K101 Distillation tar residues from the distillation (T) of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organoarsenic compounds.
- Residue from use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds.

Ink Formulation:

KOS6 Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers,

soaps and stabilizers containing chromium and lead.

Coking:

K060 Ammonia still lime sludge from coking operations.

K087 Decanter tank tan sludge from coking operations. (T)

(Source: Amended at 14 III. Req. , effective

Appendix C Chemical Analysis Test Methods

The Board incorporates by reference 40 CFR 261, Appendix III -(1986), as amended at 51 Fed. Reg. 37725, October 24, 1986-(1989), as amended at 54 Fed. Reg. 41407, October 6, 1989. This Section incorporates no future editions or modifications.

(Source: Amended at 14 III. Reg. , effective

Appendix G Basis for Listing Hazardous Wastes

EPA Hazardous constitutents for which listed hazardous waste No.

- F001 Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chlorinated fluorocarbons.
- Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-cichlorobenzene, trichlorofluoromethane.
- F003 N.A.
- F004 Cresols and cresylic acid, nitrobenzene.
- F005 Toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, 2-ethoxyethanol, benzene, 2-nitropropane
- F006 Cadmium, hexavalent chromium, nickel, cyanide (complexed).
- F007 Cyanide (salts).
- F008 Cyanide (salts).
- F009 Cyanide (salts).
- F010 Cyanide (salts).
- F011 Cyanide (salts).
- F012 Cyanide (complexed).
- F019 Hexavalent chromium, cyanide (complexed).
- F020 Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetrachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amines and other salts.
- F021 Penta- and hexachlorodibenzo-p-dioxins; penta- and
- hexachlorodibenzofurans; pentachlorophenol and its derivatives.
- F022 Tetra-, penta- and hexachlorodibenzo-p-dioxins; tetra-, penta- and hexachlorodibenzofurans.
- F023 Tetra- and pentachlorodibenzo-p-dioxins; tetra- and pentachlorodibenzofurans; tri- and tetra- chlorophenols and their

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chlorophenoxy derivative acids, esters, ethers, amines and other
F024
         Chloromethane, dichloromethane, trichloromethane, carbon
         tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-
         dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene,
         1,1,1-trichloroethame, 1,1,2-trichloroethame, trichloroethyleme,
         1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane,
         tetrachloroethylene, pentachloroethane, hexachloroethane, allyl
         chloride (3-chloropropene), dichloropropane, dichloropropene, 2-
         chloro-1,3-butadiene, hexachloro-1,3-butadiene, hexachlorocyclo-
         pentadiene, hexachlorocyclohexane, benzene, chlorobenzene,
         dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzenes,
         pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
         Chloromethane, dichloromethane, trichloromethane; carbon tetra-
F025
         chloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloro-
         ethane; trans-1,2-cichloroethylene; 1,1-dichloroethylene; 1,1,1-
         trichloroethane; 1,1,2-trichloroethane; trichloroethylene;
         1,1,1,2-tetracnloroethane; 1,1,2,2-tetrachloroethane;
         chloroethylene; pentachloroethane; hexachloroethane;
         chloride (3-chloropropene); dichloropropane; dichloropropene;
         cnloro-1,3-butadiene; hexachloro-1,3-butadiene; hexachlorocyclo-
         pentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-
         trichlorobenzene; tetrachlorobenzene; pentachlorobenzene;
         hexachlorobenzene; toluene; naphthalene.
F026
         Tetra-, penta-, and nexachlorodipenzo-p-dioxins; tetra-, penta-, and
         hexachlorodibenzofurans.
         Tetra-, penta-, and nexachlorodibenzo-p-dioxins; tetra-, penta-, and
F027
         hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and
         their chlorophenoxy derivative acids, esters, ethers, amine and other
         salts.
F028
         Tetra-, penta-, and nexachlorodibenzo-p-dioxins; tetra-, penta-, and
         hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and
         their chlorophenoxy cerivative acids, esters, ethers, amine and other
         salts.
K001
         Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-
         dimethylphenol, 2,4-zinitrophenol, trichiorophenols,
         tetrachlorophenols, 2,4-dinitrophenol, cresosote, chrysene,
         naphthalene, fluoranthene, benzo(b)fluoranthene, benzo(a)pyrene,
         indeno(1,2,3-cd)pyrene, benz(a)anthracene, dibenz(a)anthracene,
         acenaphthalene.
K002
         Hexavalent chromium, lead.
         Hexavalent chromium, lead.
K003
K004
         Hexavalent chromuim.
K005
         Hexavalent chromium, lead.
         Hexavalent chromium.
K006
         Cyanide (complexed), hexavalent chromium.
K007
K003
         Hexavalent chromium.
         Chloroform, formaldervde, methylene chloride, methyl chloride,
K009
         paraldehyde, formic acid.
         Chloroform, formaldenyde, methylene chloride, methyl chloride,
K010
         paraldehyde, formic acid, chloroacetaldehyde.
K011
         Acrylonitrile, acetonitrile, hydrocyanic acid.
K010
         Hydrocyanic acid, acrylonitrile, acetonitrile.
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Acetonitrile, acrylamide.

K014

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K015
         Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
K016
         Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride,
         hexachloroethane, perchloroethylene.
K0171
         Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis-(2-
         chloroethyl) ethers], trichloropropane, dichloropropanols.
K018
         1,2-dichloroethane, trichloroethylene, hexachlorobutadiene,
         hexachlorobenzene.
         Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane,
K019
         tetrachloroethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-
         tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon-
         tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
K020
         Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane,
         tetrachloro-ethanes (1,1,2,2-tetrachloroethane and 1,1,1,2-
         tetracnloroethane), trichloroethylene, tetrachloroethylene, carbon
         tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
         Antimony, carbon tetrachloride, chloroform.
K021
K022
         Phenol, tars (polycyclic aromatic hydrocarbons).
K023
         Phthalic anhydrice, maleic anhydride.
         Phthalic anhydride, 1,4-naphthoguinone.
K024
K025
         Meta-dinitrobenzene, 2,4-dinitrotoluene.
K026
         Paraldehyde, pyridines, 2-picoline.
K027
         Toluene diisocyanate, toluene-2, 4-diamine.
K028
         1.1.1-trichloroethane, vinyl chloride.
K029
         1,2-dichloroethane, 1,1,1-trichloroethane, vinyl chloride, vinylidene
         chloride, chloroform.
K030
         Hexachlorobenzene, hexachlorobutadiene, hexachloroethane, 1,1,1,2-
         tetrachloroethane, 1,1,2,2-tetrachloroethane, ethylene dichloride.
K031
         Arsenic.
K032
         Hexachlorocyclopentadiene.
         Hexachlorocyclopentadiene.
K033
K034
         Hexachlorocyclopentadiene.
         Creosote, chrysene, naphthalene, fluoranthene, benzo(b) fluoranthene,
K035
         benzo(a)-pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene,
         dibenzo(a)anthracene, acenaphthalene.
         Toluene, phosphorodithioic and phosphorothioic acid esters.
K036
         Toluene, phosphorodithioic and phosphorothioic acid esters.
K037
K038
         Phorate, formaldenyde, phosphorodithioic and phosphorothioic acid
K039
         Phosphorodithioic and phosphorothioic acid esters.
         Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid
K040
         esters.
K041
         Toxaphene.
         Hexachlorobenzene, ortho-dichlorobenzene.
K042
         2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
K043
K044
         N.A.
K045
         N.A.
K046
         Lead
         N.A.
K047
         Hexavalent chromium, lead.
K048
K049
         Hexavalent chromium, lead.
K050
         Hexavalent chromium.
         Hexavalent chromium, lead.
K051
K052
         Lead
         Cyanide, naphthalene, phenolic compounds, arsenic.
K060
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Hexavalent chromium, lead, cadmium.
K061
K062
         Hexavalent chromium, lead.
K064
         Lead, cadmium
K065
         Lead, cadmium
K066
         Lead, cadmium
K069
         Hexavalent chromium, lead, cadmium.
K071
         Mercury.
K073
         Chloroform, carbon tetrachloride, hexachloroethane, trichloroethane,
         tetrachloroethylene, dichloroethylene, 1,1,2,2-tetrachloroethane.
K083
         Aniline, diphenylamine, nitrobenzene, phenylenediamine.
KJ84
K085
         Benzene, dichlorobenzenes, trichlorobenzenes, tetrachlorobenzenes,
         pentachlorobenzene, hexachlorobenzene, benzyl chloride.
K086
         Lead, hexavalent chromium.
K087
         Phenol, naphthalene.
K088
         Cyanide (complexes)
K090
         Chromium
K091
         Chromium
K093
         Phthalic anhydride maleic anhydride.
K094
         Phthalic anhydride.
K095
         1,1,2-trichloroethane, 1,1,1,2-tetrachloroethane, 1,1,2,2-
         tetrachloroethane.
K096
         1,2-dichloroethane, 1,1,1,-trichloroethane, 1,1,2-trichloroethane.
K097
         Chlordane, heptachlor.
K098
         Toxaphene.
K099
         2,4-dichlorophenol, 2,4,6-trichlorophenol.
K100
         Hexavalent chromium, lead, cadmium.
K101
         Arsenic.
K102
         Arsenic.
K103
         Aniline, nitrobenzene, phenylenediamine.
         Aniline, benzene, diphenylamine, nitrobenzene, phynylenediamine.
K104
         Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-trichloropnenol
K105
K106
         Mercury.
K111
         2,4-Dinitrotoluene.
         2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K112
K113
         2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.
K114
         2.4-Toluenediamine, o-toluidine, p-toluidine.
K115
         2,4-Toluenediamine.
         Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.
K116
K117
         Ethylene dibromide
K118
         Ethylene dibromide
         Ethylene thiourea
K123
K124
         Ethylene thiourea
K125
         Ethylene thiourea
         Ethylene thiourea
K126
K131
         Dimethyl sulfate, methyl bromide
K132
         Methyl bromide
K136
         Ethylene dibromide
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N.A.--Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity or reactivity.

(Source: Amended at 14 Ill. Reg. , effective

Section 721.Appendix H Hazardous Constituents

| Common Name | Chemical Abstracts Name | Chemical Abstracts Number | |
|--|--|---|--------|
| | | | |
| Acetonitrile | Same | 75 - 05 - 8 | U003 |
| Acetophenone | Ethanone, 1-phenyl- | 98-86-2 | U004 |
| 2-Acetylaminofluorene | Acetamide, N-9H-fluoren-2-yl- | 53-96-3 | U005 |
| Acetyl chloride | Same | 75-36-5 | U006 |
| 1-Acety1-2-thiourea | Acetamide, N-(aminothioxomethyl)- | 591-08-2 | P002 |
| Acrolein | 2-Propenal | 107-02-8 | P003 |
| Acrylamide | 2-Propenamide | 79-06-1 | U007 |
| Acrylonitrile | 2-Propenenitrile | 107-13-1 | U009 |
| Aflatoxins | Same | 1402-68-2 | |
| Aldicarb | Propanal, 2-methyl-2-(methylthio)-, 0-[(methylamino)carbonyl]oxime | 116-06-3 | P070 |
| Aldrin | 4, 5, 8-Dimethanonaphthalene, 1, 3, 4, 10, 10-hexachloro-1, 4, 4a, 8a-hexahydro-, 1-alpha, 4-alpha, 4a-beta, 5-alpha, 8-alpha, 8a-beta)- | 309-00-2 | P004 |
| Allyl alcohol | 2-Propen-1-o7 | 107-18-6 | P005 |
| Allyl chloride | 1-Propene, 3-chloro- | 107-18-6 | |
| Aluminum phosphide | Same | 20859-73- | 8 P006 |
| 4-Aminobiphenyl | [1,1'-Biphenyl]-4-amine | 92-67-1 | |
| 5-(Aminomethyl)-3-isoxazolol | 3(2H)-Isoxazolone, 5-(aminomethyl)- | 2763-96-4 | P007 |
| 4-Aminopyridine | 4-Pyridinamine | 504-24-5 | P008 |
| Amitrole | 1H-1,2,4-Triazol-3-amine | 61-82-5 | U011 |
| Ammonium vanadate | Vanadic acid, ammonium salt | 7803-55-6 | |
| Aniline | Senzenamine | 62-53-3 | U012 |
| Antimony | Same | 7440-36-0 | |
| Antimony compounds, N.O.S. (not otherwise specified) | Sume | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| Aramite | Sulfurous acid, 2-chloroethyl-, 2-[4- (1,1-dimethylethyl)phenoxy]-1- methylethyl ester | 140-57-8 | |
| Arsenic | Arsenic | 7440-38-2 | |
| Arsenic compounds, N.O.S. | | | |
| Arsenic acid | Arsenic acid H ₃ AsO ₄ | 7778-39-4 | P010 |
| Arsenic pentoxide | Arsenic oxide As ₂ 0 ₅ | 1303-28-2 | |
| Arsenic trioxide | Arsenic oxide As ₂ 0 ₃ | 1327-53-3 | |
| Auramine | Benzenamine, 4, 4'- | 492-80-8 | |
| | carbonimidoylbis[N, N-dimethyl- | | |
| Azaserine | L-Serine, diazoacetate (ester) | 115-02-6 | U015 |
| Barium | Same | 7440-39-3 | |
| Barium compounds, N.O.S. | ··- | | |
| Barium cyanide | Same | 542-62-1 | P013 |

| Benz[c]acridine | Same | 225-51-4 | U016 |
|------------------------------------|---|------------|-------|
| Benz[a]anthracene | Same | 56-55-3 | U018 |
| Benzal chloride | Benzene, (dishloromethyl)- | 98-87-3 | U017 |
| Benzene | Same | 71 -43 -2 | U018 |
| Benzenearsonic acid | Arsonic acid, phenyl- | 98-05-5 | |
| Benzidine | [1,1'-Biphenyl]-4,4'-diamine | 92-87-5 | U021 |
| Benzo[b]fluoranthene | Benz[e]acephenanthrylene | 205-99-2 | |
| Benzo[j]fluoranthene | Same | 205-82-3 | |
| Benzo[a]pyrene | Same | 50-32-8 | U022 |
| p-Benzoquinone | 2,5-Cyclohexaciene-1,4-dione | 106-51-4 | U1 97 |
| Benzotrichloride | Benzene, (trissloromethyl)- | 98-07-7 | J023 |
| Benzyl chloride | Benzene, (chloromethyl)- | 100-44-7 | P028 |
| Beryllium | Same | 7440-41-7 | P015 |
| Beryllium compounds, N.O.S. | | | |
| Bromoacetone | 2-Propanone, 1-bromo- | 598-31-2 | PG17 |
| Bromoform | Methane, tripromo- | 75-25-2 | J225 |
| 4-Bromophenyl phenyl ether | Benzene, 1-bromo-4-phenoxy- | 101-55-3 | U030 |
| Brucine | Strychnidin-10-one, 2,3-dimethoxy- | 357-57-3 | P018 |
| Butyl benzyl phthalate | 1,2-Benzenedicarboxylic acid, butyl | 85-68-7 | |
| | phenylmethyl ester | | |
| Cacodylic acid | Arsenic acis, dimethyl- | 75-50-5 | U136 |
| Cadmium | Same | 7440-43-9 | |
| Cadmium compounds, N.O.S. | | | |
| Calcium chromate | Chromic acid H ₂ CrO ₄ , calcium salt | 13765-19-0 | U032 |
| Calcium cyanide | Calcium cyanice Ca(CN) ₂ | 592-01-8 | P021 |
| Carbon disulfide | Same | 75-15-0 | P022 |
| Carbon oxyfluoride | Carbonic difuoride | 353-50-4 | U033 |
| Carbon tetrachloride | Methane, tetrachloro- | 56-23-5 | U211 |
| Chloral | Acetaldenyde, trichloro- | 75-87-6 | U034 |
| Chlorambuci? | Benzenebutancic acid, 4-[bis(2- chloroethy1)amino]- | 305-03-3 | U035 |
| Chlordane | 4, 7-Methano-1H-indene, 1, 2, 4, 5, 6, 7, 8, 8-octach1oro-2, 3, 3a, 4, 7, 7a-hexahydro- | 57-74-9 | U036 |
| Chlordane, alpha and gamma isomers | ŕ | | U036 |
| Chlorinated benzenes, N.O.S. | | | |
| Chlorinated ethane, N.O.S. | | | |
| Chlorinated fluorocarbons, N.O.S. | | | |
| Chlorinated naphthalene, N.O.S. | | | |
| Chlorinated phenol, N.O.S. | | | |
| Chlornaphazine | Naphthalenamire, N, N'-bis(2- chloroethyl)- | 494-03-1 | U026 |
| Ch1oroacetaldehyde | Acetaldehyde, chloro- | 107-20-0 | P023 |
| Chloroalkyl ethers, N.O.S. | • | | |
| p-Chloroaniline | Benzenamine, 4-chloro- | 106-47-8 | P024 |
| Chlorobenzene | Benzene, chloro- | 108-90-7 | U037 |
| Chlorobenzilate | Benzeneacetic acid, 4-chloro-alpha- (4-chlorophenyl)-alpha-hydroxy-, ethyl ester | 510-15-6 | U038 |
| | | | |

| p-Chloro-m-cresol | Phenol, 4-chloro-3-methyl- | 59-50-7 | U039 |
|---|--|---|--|
| 2-Chloroethyl vinyl ether | Ethene, (2-chloroethoxy)- | 110-75-8 | U042 |
| Chloroform | Methane, trichloro- | 67-66-3 | U044 |
| Chloromethyl methyl ether | Methane, chloromethoxy- | 107-30-2 | U046 |
| beta-Chloronaphthalene | Naphthalene, 2-chloro- | 91-58-7 | U047 |
| a-Chlorophenol | Phenol, 2-chloro- | 95-57-8 | U043 |
| 1-(o-Chlorophenyl)thiourea | Thiourea, (2-chlorophenyl)- | 5344-82-1 | |
| Chloroprene | 1,3-Butadiene, 2-chloro- | 126-99-8 | |
| 3-Chloropropionitrile | Propanenitrile, 3-chloro- | 542-76-7 | P027 |
| Chromium | Same | 7440-47-3 | |
| Chromium compounds, N.O.S. | | | |
| Chrysene | Same | 218-01-9 | U050 |
| Citrus red No. 2 | 2-Naphthalenol, 1-[(2, 5- | 6358-53-8 | |
| | dimethoxyphenyl)azo]- | | |
| Coal tar creosote | Same | 8007-45-2 | |
| Copper cyanide | Copper cyanide CuCN | 544-92-3 | P029 |
| Creosote | Same | | U051 |
| Cresols (Cresylic acid) | Phenol, methyl- | 1319-77-3 | U052 |
| Crotonaldehyde | 2-Butenal | 4170-30-3 | U053 |
| Cyanides (soluble salts and | | | P030 |
| complexes), N.O.S. | | | |
| Cyanogen | Ethanedinitrile | 460-19-5 | P031 |
| Cyanogen bromide | Cyanogen bromide (CN)3r | 506-68-3 | U246 |
| Cyanogen chloride | Cyanogen chloride (CN)Cl | 506-77-4 | P033 |
| | | | |
| Cycasin | Beta-D-glucopyranoside, (methyl-ONN- | 14901-08-7 | , |
| Cycasin | <pre>Beta-D-glucopyranoside, (methyl-ONN- azoxy)methyl-</pre> | 14901-08-7 | • |
| 2-Cyclohexyl-4,6-dinitrophenol | | 14901-08-7 131-89-5 | P034 |
| | azoxy)methyl- | | |
| 2-Cyclohexyl-4,6-dinitrophenol | azoxy)methy1- Phenol, 2-cyclohexyl-4,6-dinitro- | 131-89-5 | P034 |
| 2-Cyclohexyl-4,6-dinitrophenol | <pre>azoxy)methy1- Phenol, 2-cyclohexy1-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine,</pre> | 131-89-5 | P034 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- | 131-89-5 | P034 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide | 131-89-5 50-18-0 | P034 U058 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters | 131-89-5 50-18-0 94-75-7 | P034 U058 U240 U240 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- | 131-89-5 50-18-0 | P034 U058 U240 U240 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- | 131-89-5 50-18-0 94-75-7 | P034 U058 U240 U240 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-t- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- | 131-89-5 50-18-0 94-75-7 20830-31- | P034 U058 U240 U240 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- | 131-89-5 50-18-0 94-75-7 20830-31- | P034 U058 U240 U240 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- | 131-89-5 50-18-0 94-75-7 20830-31-3 | P034 U058 U240 U240 U059 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- | 131-89-5 50-18-0 94-75-7 20830-31- | P034 U058 U240 U240 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- | 131-89-5 50-18-0 94-75-7 20830-31-3 | P034 U058 U240 U240 U059 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-L- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- | 131-89-5 50-18-0 94-75-7 20830-31-3 | P034 U058 U240 U240 U059 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin DDD | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- (dichloroethenylidene)bis[4-chloro- | 131-89-5 50-18-0 94-75-7 20830-31-3 72-54-8 72-55-9 | P034 U058 U240 U240 U059 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- (dichloroethenylidene)bis[4-chloro- Benzene, 1, 1'-(2, 2, 2- | 131-89-5 50-18-0 94-75-7 20830-31-3 | P034 U058 U240 U240 U059 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin DDD DDE DDT | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- (dichloroethenylidene)bis[4-chloro- Benzene, 1, 1'-(2, 2, 2- trichloroethylidene)bis[4-chloro- | 131-89-5 50-18-0 94-75-7 20830-31-3 72-54-8 72-55-9 50-29-3 | P034 U058 U240 U240 U059 U060 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin DDD | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- (dichloroethenylidene)bis[4-chloro- Benzene, 1, 1'-(2, 2, 2- trichloroethylidene)bis[4-chloro- Carbamothioic acid, bis(1- | 131-89-5 50-18-0 94-75-7 20830-31-3 72-54-8 72-55-9 | P034 U058 U240 U240 U059 U060 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin DDD DDE DDT | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- (dichloroethenylidene)bis[4-chloro- Benzene, 1, 1'-(2, 2, 2- trichloroethylidene)bis[4-chloro- Carbamothioic acid, bis(1- methylethyl)-, S-(2, 3-dichloro-2- | 131-89-5 50-18-0 94-75-7 20830-31-3 72-54-8 72-55-9 50-29-3 | P034 U058 U240 U240 U059 U060 |
| 2-Cyclohexyl-4,6-dinitrophenol Cyclophosphamide 2,4-D 2,4-D, salts and esters Daunomycin DDD DDE DDT | azoxy)methyl- Phenol, 2-cyclohexyl-4,6-dinitro- 2H-1, 3, 2-0xazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide Acetic acid, (2,4-dichlorophenoxy)- Acetic acid, (2,4-dichlorophenoxy)-, salts and esters 5, 12-Naphthacenedione, 8-acetyl-10- [(3-amino-2, 3, 6-trideoxy-alpha-1- lyxo-hexopyranosyl)oxy]-7, 8, 9, 10- tetrahydro-6, 8, 11-trihydroxy-1- methoxy-, 8S-cis)- Benzene, 1,1'-(2,2- dichloroethylidene)bis[4-chloro- Benzene, 1, 1'- (dichloroethenylidene)bis[4-chloro- Benzene, 1, 1'-(2, 2, 2- trichloroethylidene)bis[4-chloro- Carbamothioic acid, bis(1- | 131-89-5 50-18-0 94-75-7 20830-31-3 72-54-8 72-55-9 50-29-3 | P034 U058 U240 U240 U059 U060 |

| Steme Same | Dibenz[a,j]acridine | Same | 224-42-0 | |
|--|---|---|-----------|--------|
| | Dibenz[a,h]anthracene | Same | 53-70-3 | U 063 |
| | | Same | 194-59-2 | |
| | Dibenzo[a,e]pyrene | Naphthc[1,2,3,4-def]chrysene | 192-65-4 | |
| | | | 189-64-C | |
| 1,2-01bnomc-3-chloropropane | | | | U064 |
| Dibuty1 phthalate | · · · · · | | | U066 |
| Benzene, 1,2-dichloro- | | | | |
| March Marc | • | | | |
| March Marc | o-Dichlorobenzene | Benzene, 1,2-dichloro- | 95-50-1 | U070 |
| Dichlorobenzene Benzene, 1,4-dichloro- 2531-22-6 3,3'-Dichlorobenzene, N.O.S. Benzene, dichloro- 2531-22-6 3,3'-Dichlorobenzene I.1.'-Biphenyl]-4, 4'-diamine, 3, 3'-91-92-1 0073 3'-dichloro- 1,4-Dichloro-2-butene 2-Butene, 1,4-dichloro- 764-41-0 0074 Dichlorodifluoromethane Methane, dichloro- 755-71-8 0075 Dichloroethylene Ethene, 1,1-dichloro- 75-35-4 0078 1,2-Dichloroethylene Ethene, 1,1-dichloro- 75-35-4 0078 1,2-Dichloroethylene Ethene, 1,1-dichloro- 156-50-5 0079 Dichloroethylene Ethene, 1,1-dichloro- 156-50-5 0079 Dichloroethylene Ethene, 1,1-dichloro- 156-50-5 0079 Dichloroethylene Propane, 2,2'-oxybis[2-chloro- 108-60-1 0027 Dichloromethylether Propane, 2,2'-oxybis[2-chloro- 108-60-1 0027 Dichloromethylether Methane, oxyois[chloro- 542-88-1 0027 Dichloromethylether Methane, oxyois[chloro- 120-83-2 0081 2,4-Dichlorophenol Phenol, 2,4-dichloro- 120-83-2 0081 2,6-Dichlorophenol Phenol, 2,5-dichloro- 120-83-2 0081 2,6-Dichlorophonylarsine Phenol, 2,6-dichloro- 26638-19-7 Dichloropropane, N.O.S. Propane, dichloro- 26638-19-7 Dichloropropane, N.O.S. Propane, dichloro- 26638-13-3 Dichloropropene, N.O.S. 1-Propene, dichloro- 26638-13-3 Dichloropropene, N.O.S. 1-Propene, dichloro- 542-73-3 Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 0084 Dichloropropene 1-Propene, 1,3-dichloro- 120-82-23-8 Dichloropropene 1-Propen | | | | |
| Dichloroberzene, N.O.S. Benzene, dichloro- 35321-22-6 3,3'-Dichlorobenzidine 11,1'-Bipheryll-4, 4'-diamine, 3, 91-94-1 0073 3'-dichloro- 764-41-0 0074 0074 0075 | p-Dichlorobenzene | | | |
| 3.3'-Dichlorobenzidine | | | | |
| 1,4-0ichloro-2-butene 2-Butene, 1,4-dichloro- 754-41-0 0074 0ichlorodifluoromethane Methane, dichlorodiffluoro- 75-71-8 075 0ichloroethylene, N.O.S. Dichloroethylene 23223-30-2 1,1-Dichloroethylene Ethene, 1,1-dichloro- 75-35-4 073 1,2-Dichloroethylene Ethene, 1,2-dichloro- (E)- 156-50-5 079 0ichloroethylether Ethane, 1,1'-cxybis[2-chloro- 111-44- 0025 0ichlorodiscoropylether Propane, 2,2'-oxybis[2-chloro- 108-60-1 0027 0ichloromethoxyethane Ethane, 1,1'-[methylenebis(oxy)bis[2- 111-91-1 0024 0ichloromethylether Methane, oxyois[chloro- 120-83-2 0081 2,4-Dichlorophenol Phenol, 2,4-dichloro- 120-83-2 0081 2,6-Dichlorophenol Phenol, 2,6-dichloro- 26638-19-7 0ichloropropane, N.O.S. Propane, dichloro- 26545-73-3 0ichloropropane, N.O.S. Propane, dichloro- 26545-73-3 0ichloropropane, N.O.S. Propane, dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 26952-23-8 1,2-3,4-Diepoxybutane 2,7-3,6-Dimethanonaphth[2,3-b]oxi- 60-57-1 P037 1,2-3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 0085 0iethylarsine Arsine, diethyl- 2,2-diethyl- 692-42-2 P038 1,4-Diethylenexide 1,4-Dioxane 123-91-1 0108 0iethylhexyl phthalate 4,4-Dioxane 14,5-5 0085 0iethylhexyl phthalate 4,4-Dioxane 14,5-5 0085 0iethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- ethylhexyl) ester 1,3-dichloro- 120-82-1 0108 0,0-Diethyl S-methyl dithiophosphate Phosphoric acid, 0,0-diethyl 3288-58-2 0087 0iethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 311-45-5 0041 | | | | |
| 1,4-Dichloro-2-butene 2-Butene, 1,4-dichloro- 764-41-0 074 Dichlorodifluoromethane Methane, dichlorodifluoro- 75-71-8 075 Dichloroethylene, N.O.S. Dichloroethylene 25223-30-2 1,1-Dichloroethylene Ethene, 1,1-dichloro- 75-35-4 073 1,2-Dichloroethylene Ethene, 1,1-dichloro- (E)- 156-60-5 079 Dichloroethylene Ethane, 1,1'-cxybis[2-chloro- 111-44-4 025 Dichloromethoxylether Propane, 2,2'-oxybis[2-chloro- 108-60-1 027 Dichloromethoxyethane Ethane, 1,1'-[methylenebis(cxy)bis[2- 111-91-1 0624 Chloromethylether Methane, oxybis[chloro- 542-88-1 PC16 2,4-Dichlorophenol Phenol, 2,4-dichloro- 120-83-2 081 2,6-Dichlorophenol Phenol, 2,6-dichloro- 120-83-2 081 2,6-Dichlorophenol Phenol, 2,6-dichloro- 26538-19-7 Dichlorophenylarsine Arsonous dichloride, phenyl- 696-28-6 P036 Dichloropropane, N.O.S. Propane, dichloro- 26545-73-3 Dichloropropane, N.O.S. 1-Propene, dichloro- 26952-23-8 1,3-Dichloropropene 1,3-dichloro- 26952-23-8 1,3-Dichloropropene 2,2'-Bioxirane 1464-53-5 084 Diethylarsine 2,2'-Bioxirane 1464-53-5 085 Diethylarsine 1,4-Dioxane 123-91-1 086 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- ethylhexyl) ester N,N'-Diethylhydrazine 1,2-diethyl- 1615-80-1 086 O,-O-Diethyl S-methyl dithiophosphate Phosphoric acid, diethyl 4- 311-45-5 041 Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 041 | .,. | - · · · · · · · · · · · · · · · · · · · | | |
| Dischlorodifluoromethane Methane, dichlorodifluoromethylene 75-71-8 U075 Dischloroethylene, N.O.S. Dischloroethylene 25322-30-2 1,1-Dischloroethylene Ethene, 1,1-dischloromethylene 156-50-5 U079 Dischloroethylene Ethene, 1,1'-cxybis[2-chloromethoromethylene] 111-44-4 U025 Dischloroethylether Propane, 2,2'-oxybis[2-chloromethoromethoromethoryethane Ethane, 1,1'-fmethylenebis(sxy)bis[2-chloromethoromethoryethane] 111-91-1 U027 Dischloromethoxyethane Ethane, 1,1'-fmethylenebis(sxy)bis[2-chloromethoryethane] 111-91-1 U024 Chloromethoryethane Methane, oxybis[chloromethoryethane] 542-88-1 P016 2,4-Dischlorophenol Phenol, 2,4-dischloromethoryethane 120-83-2 U081 2,4-Dischlorophenol Phenol, 2,6-dischloromethoryethane 37-65-0 U082 Dischlorophophanylarsine Arsonous dischloromethoryethane 26638-19-7 Dischlorophophanel 26638-19-7 Dischloropropanel, N.O.S. Propane, dischloromethanonaphthila, 3-bloximane 26952-23-8 542-75-6 U084 1,3-Dischloropropene 1-Propane, dischloromethanonaphthila, 2 beta, 2a alpha, 3 beta, 6 | 1.4-Dichloro-2-butene | | 764-41-0 | U074 |
| Dichloroethylene, N.O.S. | | | | |
| 1,1-Dichloroethylene | | | | |
| 1,2-Dicnloroethylene | | | | |
| Dichloroethyl ether Ethane, 1,1'-oxybis[2-chloro- 111-44-4 UC25 Dichloroisopropyl ether Propane, 2,2'-oxybis[2-chloro- 108-60-1 U027 Dichloromethoxyethane Ethane, 1,1'-[methylenebis(oxy)bis[2-chloro- 111-91-1 U024 chloro- Methane, oxybis[chloro- 542-88-1 PC16 2,4-Dichlorophenol Phenol, 2,4-dichloro- 120-83-2 U081 2,6-Dichlorophenol Phenol, 2,6-dichloro- 37-65-0 U082 Dichlorophenylarsine Arsonous dichloride, phenyl- 696-28-6 P036 Dichloropropane, N.O.S. Propane, dichloro- 26545-73-3 26638-19-7 Dichloropropanol, N.O.S. Propane, dichloro- 26545-73-3 26952-23-8 1,3-Dichloropropene 1-Propene, dichloro- 542-75-6 U084 0ieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-1a, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, 1a alpha, 2 beta, 2a alpha, 3 beta, 60-57-1 P037 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine | · · | | | |
| Dick loro is propyle ther Propane, 2,2'-oxybis[2-chloro- 108-60-1 U027 Dick loro methoxyethane Ethane, 1,1'-[methylenebis(cxy)bis[2-chloro- 111-91-1 U024 chloro- D'chloromethyl ether Methane, oxybis[chloro- 120-83-2 U081 U081 U081 U082 U082 U081 U082 U082 U081 U082 U081 U082 U082 U081 U082 U082 U081 U082 U082 U082 U082 U082 U081 U082 U082 U082 U082 U082 U082 U082 U082 | | | | |
| Dichloromethoxyethane | | | | |
| Chloro- Dichloromethyl ether | · - | | | |
| Dichloromethyl ether Methane, oxyois[chloror 542-88-1 P016 2,4-Dichlorophenol Phenol, 2,4-dichloror 120-83-2 U081 2,6-Dichlorophenol Phenol, 2,6-dichloror 37-65-0 U082 Dichlorophenylarsine Arsonous dichloride, phenyl 696-28-6 P036 Dichloropropane, N.O.S. Propane, dichloror 26638-19-7 Dichloropropene, N.O.S. 1-Propene, dichloror 26545-73-3 Dichloropropene, N.O.S. 1-Propene, dichloror 542-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxir 642-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxir 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloror-1a, 2, 2a, 3, 6, 6a, 7, 7a-octahydror, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)-1 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethylenexide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- ethyl-whylosyl) ethylhydrazine 1,2-ciethyl- hydrazine, 1,2-ciethyl- hydrazine, 1,2-ciethyl | | | | |
| 2,4-Dichlorophenol Phenol, 2,4-dichloro- 120-83-2 U081 2,6-Dichlorophenol Phenol, 2,6-dichloro- 37-65-0 U082 Dichlorophenylarsine Arsonous dichloride, phenyl- 696-28-6 P036 Dichloropropane, N.O.S. Propane, dichloro- 26638-19-7 Dichloropropene, N.O.S. 1-Propene, dichloro- 26545-73-3 Dichloropropene, N.O.S. 1-Propene, dichloro- 542-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-1a, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 1,4-Dioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U08 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2-ethyl-7) 117-81-7 U028 N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl-2-diethyl-2-diethyl-3 1615-30-1 U086 O,-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3 3288-58-2 U097 S-methyl | Dichloromethyl ether | • | 542-88-1 | P016 |
| 2,6-Dichlorophenol Phenol, 2,6-dichloro- 37-65-0 U082 Dichlorophenylarsine Arsonous dichloride, phenyl- 696-28-6 P036 Dichloropropane, N.O.S. Propane, dichloro- 26638-19-7 Dichloropropene, N.O.S. 1-Propene, dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester 117-81-7 U028 N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-30-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U097 S-methyl ester Phosphorodithioic acid, diethyl 4- 311-45-5 P041 <td></td> <td></td> <td></td> <td></td> | | | | |
| Dichlorophenylarsine Arsonous dichloride, phenyl- 696-28-6 P036 Dichloropropane, N.O.S. Propane, dichloro- 26638-19-7 Dichloropropanol, N.O.S. Propanol, dichloro- 26545-73-3 Dichloropropene, N.O.S. 1-Propene, dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-1a, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2-ethylration) 117-81-7 U028 N,N'-Diethylhydrazine Hydrazine, 1,2-diethylration acid, 0,0-diethyl 3288-58-2 U087 O,-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, diethyl 4- 311-45-5 P041 | | | | |
| Dichloropropane, N.O.S. Propane, dichloro- 26638-19-7 Dichloropropanol, N.O.S. Propanol, dichloro- 26545-73-3 Dichloropropene, N.O.S. 1-Propene, dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (la alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2-ethyl-wyll) 117-81-7 U028 N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl-ster 1615-80-1 J086 O,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U097 S-methyl ester Phosphorodithioic acid, diethyl 4- 311-45-5 P041 | | | | |
| Dicnloropropanol, N.O.S. Propanol, dichloro- 26545-73-3 Dicnloropropene, N.O.S. 1-Propene, dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 U084 Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U097 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| Dichloropropene, N.O.S. 1-Propene, dichloro- 26952-23-8 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 0084 Dieldrin 2,7:3,6-Dimethanonaphth[2,3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (la alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester Hydrazine 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U097 S-methyl ester Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| 1,3-Dichloropropene 1-Propene, 1,3-dichloro- 542-75-6 U084 Dieldrin 2,7:3,6-Dimethanonaphth[2,3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2-ethyl-wyl) ester 117-81-7 U028 N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl-seter 1615-80-1 U087 O,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| Dieldrin 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxi- 60-57-1 P037 rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- ethylhexyl) ester 117-81-7 U028 N,N'-Diethylhydrazine Hydrazine, 1,2-ciethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| rene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (la alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)- 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha) - (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha) - 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl - 692-42-2 P038 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- t17-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl - 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| 1,2:3,4-Diepoxybutane 2,2'-Bioxirane 1464-53-5 U085 Diethylarsine Arsine, diethyl- 592-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | | |
| Diethylarsine Arsine, diethyl- 692-42-2 P038 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | 1.2:3.4-Diepoxybutane | | 1464-53-5 | U 08 5 |
| 1,4-Diethyleneoxide 1,4-Dioxane 123-91-1 U108 Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | • | 692-42-2 | P038 |
| Diethylhexyl phthalate 1,2-Benzenedicarboxylic acid, bis(2- 117-81-7 U028 ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | - | • | | U108 |
| ethylhexyl) ester N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | | 117-81-7 | |
| N,N'-Diethylhydrazine Hydrazine, 1,2-diethyl- 1615-80-1 U086 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | 3 , | | | |
| 0,0-Diethyl S-methyl dithiophosphate Phosphorodithioic acid, 0,0-diethyl 3288-58-2 U087 S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | N,N'-Diethylhydrazine | · · · · · · · · · · · · · · · · · · · | 1615-80-1 | บ 08 6 |
| S-methyl ester Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | | • | | |
| Diethyl-p-nitrophenyl phosphate Phosphoric acid, diethyl 4- 311-45-5 P041 | - · · · · · · · · · · · · · · · · · · · | | | |
| | Diethyl-p-nitrophenyl phosphate | | 311-45-5 | P041 |
| | | nitrophenyl ester | | |

| Diethyl phthalate | 1,2-Benzenedicarboxylic acid, diethylester | 84-66-2 | 8800 |
|--|--|------------|---------|
| 0,0-Diethyl O-pyrazinyl | Phosphorothioic acid, 0,0-diethy1 0- | 297-97-2 | P040 |
| phosphorothioate | pyrazinyl ester | | . • . • |
| Diethylstilbestrol | Phenol, 4,4'-(1,2-diethyl-1,2- | 56-53-1 | U089 |
| • | ethenediyl)bis-, (E)- | | |
| Dihydrosafrole | 1,3-Benzodioxole, 5-propyl- | 94-58-6 | U090 |
| Diisopropylfluorophosphate (DFP) | Phosphorofluoridic acid, bis(1- | 55-91-4 | P043 |
| - 1 or | methylethyl) ester | | |
| Dimethoate | Phosphorodithioic acid, 0,0-dimethyl | 60-51-5 | P044 |
| | S-[2-(methylamino)-2-oxoethyl] ester | | |
| 3,3'-Dimethoxybenzidine | [1,1'-Bipheny1]-4,4'-diamine, 3,3'- | 119-90-4 | U091 |
| o, o o me on o xy o emili / o me | dimethoxy- | 113 30 1 | 0051 |
| p-Dimethylaminoazobenzene | Benzenamine, N,N-dimethyl-4- | 60-11-7 | U093 |
| p 5 imatily valle in our production | (phenylazo)- | | 0030 |
| 7,12-Dimethylbenz[a]anthracene | Benz[a]anthracene, 7,12+dimethy1+ | 57-97-6 | U094 |
| 3,3'-Dimethylbenzidine | [1,1'-Biphenyl]-4,4'-diamine, 3,3'- | 119-93-7 | U095 |
| | dimethy1- | | |
| Dimethylcarbamoyl chloride | Carbamic chloride, dimethyl- | 79-44-7 | U097 |
| 1,1-Dimethylhydrazine | Hydrazine, 1,1-dimethyl- | 57-14-7 | U098 |
| 1,2-Dimethylhydrazine | Hydrazine, 1,2-dimethy1- | 540-73-8 | U099 |
| alpha,alpha-Dimethylphenethylamine | Benzeneethanamine, alpha, alpha- | 122-09-8 | P046 |
| a programme of the control of the co | dimethyl- | | |
| 2,4-Dimethylphenol | Phenol, 2,4-dimethyl- | 105-67-9 | U101 |
| Dimethylphthalate | 1,2-Benzenedicarboxylic acid, | 131-11-3 | U102 |
| | dimethyl ester | | |
| Dimethyl sulfate | Sulfuric acid, dimethyl ester | 77-73-1 | U103 |
| Dinitrobenzene, N.O.S. | Benzene, dinitro- | 25154-54-5 | |
| 4,6-Dinitro-o-cresol | Phenol, 2-methyl-4,6-dinitro- | 534-52-1 | P047 |
| 4,6-Dinitro-o-cresol salts | | | P047 |
| 2,4-Dinitrophenol | Phenol, 2,4-dinitro- | 51 -28-5 | P048 |
| 2,4-Dinitrotoluene | Benzene, 1-methy1-2,4-dinitro- | 121-14-2 | U105 |
| 2,6-Jinitrotoluene | Benzene, 2-methyl-1,3-dinitro- | 506-20-2 | U106 |
| Dinoseb | Phenol, 2-(1-methylpropyl)-4,6- | 88-85-7 | 2020 |
| | dinitro- | | |
| Di-n-octyl phthalate | 1,2-Benzenedicarboxylic acid, dioctyl | 117-34-0 | U107 |
| - | ester | | |
| Diphenylamine | Benzenamine, N-phenyl- | 122-39-4 | |
| 1,2-Diphenylhydrazine | Hydrazine, 1,2-diphenyl- | 122-66-7 | U109 |
| Di-n-propylnitrosamine | 1-Propanamine, N-nitroso-N-propyl- | 621-64-7 | U111 |
| Disulfoton | Phosphorodithioic acid, O, D-diethyl | 298-04-4 | P039 |
| | S-[2-(ethylthio)ethyl] ester | | |
| Dithiobiuret | Thioimidodicarbonic diamide | 541-53-7 | P049 |
| | [(H ₂ N)C(S)] ₂ NH | | |
| Endosulfan | 6, 9-Methano-2, 4, 3-benzodioxathie- | 115-29-7 | P050 |
| | pen, 6, 7, 8, 9, 10, 10-hexachloro-1, | | |
| | 5, 5a, 6, 9, 9a-hexahydro-, 3-oxide, | | |
| | | | |

| Endothal | 7-0xabicyclo[2.2.1]heptane-2, 3-dicarboxylic acid | 145-73-3 | 8809 |
|---------------------------------------|---|---------------------------|--------|
| Endrin | 2, 7:3, 6-Dimethanonaphth[2, 3-b]oxirene, 3, 4, 5, 6, 9, 9-hexachloro-la, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (la alpha, 2 beta, 2a beta, 3 alpha, 6 alpha, 6a beta, 7 beta, 7a alpha)-, | 72 -20 -8 | P051 |
| Endrin metabolites | , | | P051 |
| Epichlorohydrin | Oxirane, (chloromethyl)- | 106-89-8 | U041 |
| Epinephrine | 1,2-Benzenedial, 4-[1-hydroxy-2- | 51 -43 -4 | P042 |
| ' ' | (methylamino)ethyl]-, (R)- | | |
| Ethyl carbamate (urethane) | Carbamic acid, ethyl ester | 51 -79-6 | U238 |
| Ethyl cyanide | Propanenitrile | 107-12-0 | P101 |
| Ethylenebisdithiccarbamic acid | Carbamodithioic acid, 1,2- | 111-54-6 | U114 |
| · | ethanediylbis- | | |
| Ethylenebisdithiocarbamic acid, salts | · | | U114 |
| and esters | | | |
| Ethylene dibromide | Ethane, 1,2-dibromo- | 106-93-4 | บ067 |
| Ethylene dichloride | Ethane, 1,2-dichloro- | 107-06-2 | U077 |
| Ethylene glycol monoethyl ether | Ethanol, 2-ethoxy- | 110-80-5 | U359 |
| Ethyleneimine | Aziridine | 151 -56 - 4 | P054 |
| Ethylene oxide | Oxirane | 75-21 - 8 | U115 |
| Ethylenethiourea | 2-Imidazolidinethione | 96-45-7 | U116 |
| Ethylidine dichloride | Ethane, 1,1-dichloro- | 75-34-3 | U 07 6 |
| Ethyl methacrylate | 2-Propenoic acid, 2-methyl-, ethyl | 97-63-2 | U118 |
| | ester | | |
| Ethyl methanesulfonate | Methanesulfonic acid, ethyl ester | 62 -50 - 0 | U119 |
| Famphur | Phosphorothioc acid, 0-[4- | 52-85-7 | P097 |
| | [(dimethylamino)sulfonyl]phenyl] 0,0- | | |
| | dimethyl ester | | |
| Fluoranthene | Same | 206-44-0 | U120 |
| Fluorine | Same | 7782-41-4 | P056 |
| Fluoroacetamide | Acetamide, 2-fluoro- | 640-19-7 | P057 |
| Fluoroacetic acid, sodium salt | Acetic acid, fluoro-, sodium salt | 62 - 74 - 8 | P058 |
| Formaldebyde | Same | 50-00-0 | U122 |
| Formic acid | Same | 64-18-16 | U123 |
| Glycidylaldehyde | Oxiranecarboxaldehyde | 765-34-4 | U126 |
| Halomethanes, N.O.S. | | | |
| Heptachlor | 4, 7-Methano-1H-indene, 1, 4, 5, 6, | 76-44-8 | P059 |
| | 7, 8, 8-heptachloro-3a, 4, 7, 7a- | | |
| | tetrahydro- | | |
| Heptachlor epoxide | 2, 5-Methano-2H-indeno[1, 2b]oxirene, | 1024-57-3 | |
| | 2, 3, 4, 5, 6, 7, 7-heptachloro-la, | | |
| | 1b, 5, 5a, 6, 6a-hexanydro-, (1a | | |
| | alpha, 1b beta, 2 alpha, 5 alpha, 5a | | |
| | beta, 6 beta, 6a alpha)- | | |
| Heptachlor epoxide (alpha, beta and | | | |

gamma isomers)

| Hexachlorobenzene | Benzene, hexachloro- | 118-74-1 | U127 |
|------------------------------------|---|-------------|---------------|
| Hexachlorobutadiene | 1,3-Butadiene, 1,1,2,3,4,4- | 87-68-3 | U123 |
| | hexachloro- | | |
| Hexachlorocyclopentadiene | 1,3-Cyclopentadiene, 1,2,3,4,5,5- hexachloro- | 77 - 47 - 4 | U130 |
| Hexachlorodibenzo-p-dioxins | | | |
| Hexachlored ibenzofurans | | | |
| Hexachloroethane | Etname, hexachloro- | 67 - 72 - 1 | U131 |
| Hexach lorophene | Prenol, 2,2'-methylenebis(3,4,6-trichloro- | 70-30-4 | U132 |
| Hexach loropropene | 1-Propene, 1,1,2,3,3,3-hexachloro- | 1888-71-7 | U 243 |
| Hexaethyltetraphosphate | Tetraphosphoric acid, hexaethyl ester | 757-58-4 | P062 |
| Hydrazine | Same | 302 -01 -2 | U133 |
| Hydrogen cyanide | Hydrocyanic acid | 74-90-8 | P063 |
| Hydrogen fluoride | Hydrofluoric acid | 7664-39-3 | U134 |
| Hydrogen sulfide | Hydrogen sulfide H ₂ S | 7783-06-4 | U135 |
| <pre>Indeno[1,2,3-cd] pyrene</pre> | Same | 193-39-5 | U137 |
| Isobutyl alcohol | 1-Propanol, 2-methyl- | 78-33-1 | U140 |
| Isodrin | 1, 4:5, 8-Dimethanonaphthalene, 1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-, (1 alpha, 4 alpha, 4a beta, 5 beta, 8 beta, 8a beta)-, | 465-73-6 | P060 |
| Isosafrole | 1,3-Benzodioxole, 5-(1-propenyl)- | 120-58-1 | U141 |
| Kepone | 1, 3, 4-Metheno-2H-cyclobuta- | 143-50-0 | U142 |
| | [cd]pentalen-2-one, 1, 1a, 3, 3a, 4, | | |
| | 5, 5, 5a, 5b, 6-decachlorocctahydro-, | | |
| Lasiocarpine | 2-Butenoic acid, 2-methyl-, 7-[[2, 3-dihydroxy-2-(1-methoxyethyl)-3- | 303-34-1 | U143 |
| | <pre>methyl-1-oxobutoxy]methyl]-2, 3, 5,</pre> | | |
| | 7a-tetrahydro-1H-pyrrolizia-l-yl | | |
| | ester, [15-[1-alpha(Z), 7(25*, 3R*), | | |
| | 7a alpha]]- | | |
| Lead | Same | 7439-92-1 | |
| Lead and compounds, N.O.S. | | | |
| Lead acetate | Acetic acid, lead (2+) salt | 301-04-2 | 0144 |
| Lead phosphate | Phosphoric acid, lead (2+) salt (2:3) | 7445-27-7 | U145 |
| Lead subacetate | Lead, bis(acetato-0)tetrahydroxytri- | 1335-32-6 | U146 |
| Lindane | Cyclohexane, 1,2,3,4,5,6-hexachloro-, | 58-89-9 | U129 |
| | 1 alpha, 2 alpha, 3 beta, 4 alpha, 5 alpha, 6 beta)- | | |
| Maleic anhydride | 2,5-Furandione | 108-31-6 | U147 |
| Maleic hydrazide | 3,6-Pyridazinedione, 1,2-dinydro- | 123-33-1 | U148 |
| Malononitrile | Propanedinitrile | 109-77-3 | U1 : 9 |
| Melphalan | L-Phenylalanine, 4-[bis(2- | 148-80-3 | U150 |
| | chloroethyl)amino]- | | |
| Mercury | Same | 7439-37-6 | J:51 |
| Mercury compounds, N.O.S. | | | |
| | | | |

| Mercury fulminate | Fulminic acid, mercury (2+) salt | 628-86-4 | P065 |
|------------------------------------|--|------------------|---------------|
| Methacrylonitrile | 2-Propenenitrile, 2-methyl- | 126-98-7 | U152 |
| Methapyrilene | <pre>1,2-Ethanediamine, N,N-dimethyl-N'-2- pyridinyl-N'-(2-thienylmethyl)-</pre> | 91-80-5 | U155 |
| Metholmyl | <pre>Ethanimidothioic acid, N-[[(methyl- amino)carbonyl]oxy]-, methyl ester</pre> | 16752-77-5 | P056 |
| Methoxychlor | Benzene, 1,1'-(2,2,2- tricnloroethylidene)bis[4-methoxy- | 72 -43 -5 | U247 |
| Methyl bromide | Methane, bromo- | 74-83-9 | U029 |
| Methyl chloride | Methane, chloro- | 74-37-3 | U045 |
| Methylchlorocarbonate | Carbonochloridic acid, methyl ester | 79-22-1 | U156 |
| Methyl chloroform | Ethane, 1,1,1-trichloro- | 71-55-6 | U226 |
| 3-Methylcholanthrene | Benz[j]aceanthrylene, 1,2-dihydro-3- methyl- | 56-49-5 | U157 |
| 4,4'-Methylenebis(2-chloroaniline) | Benzenamine, 4,4'-methylenebis[2- cnloro- | 101-14-4 | U158 |
| Methylene bromide | Methane, dibromo- | 74-95-3 | U058 |
| Methylene chloride | Methane, dichloro- | 75-09-2 | U080 |
| Methyl ethyl ketone (MEK) | 2-Butanone | 78-93-3 | U159 |
| Methyl ethyl ketone peroxide | 2-Butanone, peroxide | 1333-23-4 | U160 |
| Metnyl hydrazine | Hydrazine, methyl- | 60-34-4 | P068 |
| Methyl iodide | Methane, iodo- | 74-88-4 | U138 |
| Methyl isocyanate | Methane, isocyanato- | 624-83-9 | P064 |
| 2-Methyllactonitrile | Propanenitrile, 2-hydroxy-2-methyl- | 75-36-5 | P069 |
| Methyl methacrylate | 2-Propenoic acid, 2-methyl-, methylester | 80-52 - 6 | J162 |
| Methyl methanesulfonate | Methanesulfonic acid, methyl ester | 66-27-3 | |
| Methyl parathion | Phosphorothioic acid, 0,0-dimethy1 0-(4-nitropheny1) ester | 298-00-0 | P071 |
| Methylthiouracil | 4-(1H)-Pyrimidinone, 2,3-dihydro-6- methyl-2-thioxo- | 56-04-2 | U164 |
| Mitemycin C | Azirino[2', 3':3, 4]pyrrolo[1, 2-a]indole-4, 7-dione, 6-amino-8- [[(aminocarbonyl)oxy]methyl]-1, 1a, 2, 8, 8a, 8b-hexahydro-8a-methoxy-5- methyl-, [1a-S-(1a alpha, 8 beta, 8a | 50-07-7 | U 01 0 |
| MNNG | <pre>alpha, 8b alpha)]-, Guanidine, N-methyl-N'-nitro-N- nitroso-</pre> | 70-25-7 | U163 |
| Mustard gas | Ethane, 1,1'-thiobis[2-chloro- | 505-60-2 | |
| Naphthalene | Same | 91-20-3 | U165 |
| 1,4-Naphthoquinone | 1,4-Naphthalenedione | 130-15-4 | U166 |
| alpha-Naphthylamine | 1-Naphthalenamine | 134-32-7 | U167 |
| beta-Naphthylamine | 2-Naphthalenamine | 91-59-8 | ป168 |
| alpha-Naphthylthiourea | Thiourea, 1-maphthalenyl- | 86-88-4 | P 07 2 |
| Nickel | Same | 7440-02-0 | |
| Nickel compounds, N.O.S. | | | |
| Nickel carbonyl | Nickel carbonyl Ni(CO) ₄ , (T-4)- | 13463-39- | 3 P073 |

| Nickel cyanide | Nickel cyanide Ni(CN) ₂ | 557-19-7 | P074 |
|--------------------------------------|--|------------------|----------|
| Nicotine | Pyridine, 3-(1-methyl-2- | 54-11-5 | P075 |
| | pyrrolidinyl)-, (S)- | 34 11 3 | 10/5 |
| Nicotine salts | p) | | P075 |
| Nitric oxide | Nitrogen oxide NO | 10102-43-9 | |
| p-Nitroaniline | Benzenamine, 4-mitro- | 100-01-6 | 2077 |
| Nitrobenzene | Benzene, nitro- | 98-95-3 | P073 |
| Nitrogen dioxide | Nitragen oxide NO ₂ | 10102-44-0 | |
| Nitrogen mustard | Ethanamine, 2-chloro-N-(2- | 51 -75 - 2 | |
| With agen masters | chloroethyl)-N-methyl- | 31 /3 2 | |
| Nitrogen mustard, hydrochloride salt | en lor design, in meenign | | |
| Nitrogen mustard N-oxide | Ethanamine, 2-chloro-N-(2- | 126-85-2 | |
| | chloroethyl)-N-methyl-, N-oxide | 120 03 2 | |
| Nitrogen mustard, N-oxide, | and congress of the congress o | | |
| nydrochloride salt | | | |
| Nitroglycerin | 1,2,3-Propanetriol, trinitrate | 55-63-0 | P081 |
| p-Nitrophenol | Phenol, 4-nitro- | 100-02-7 | U170 |
| 2-Nitropropane | Propane, 2-nitro- | 79-46-9 | U171 |
| Nitrosamines, N.O.S. | | 35576-91-1 | |
| N-Nitrosodi-n-butylamine | 1-Butanamine, N-buty1-N-nitroso- | 924-16-3 | U172 |
| N-Nitrosodiethanolamine | Ethanol, 2,2'-(nitrosoimino)bis- | 1116-54-7 | |
| N-Nitrosodiethylamine | Ethanamine, N-ethyl-N-nitroso- | 55-18-5 | U174 |
| N-Nitrosodimethylamine | Methanamine, N-methyl-N-mitroso- | 62 -75-9 | P082 |
| N-Nitroso-N-ethylurea | Urea, N-ethyl-N-nitroso- | 759-73-9 | U176 |
| N-Nitrosomethylethylamine | Ethanamine, N-methyl-N-mitroso- | 10595-95-6 | |
| N-Nitroso-N-methylurea | Urea, N-methyl-M-nitroso- | 684-93-5 | U177 |
| N-Nitroso-N-methylurethane | Carbamic acid, methylnitroso-, ethyl | 615-53-2 | U178 |
| • | ester | | |
| N-Nitrosomethylvinylamine | Vinylamine, N-methyl-N-mitroso- | 4549-40-0 | P 08 ‡ |
| N-Nitrosomorpholine | Morpholine, 4-nitroso- | 59-89-2 | |
| N-Nitrosonornicotine | Pyridine, 3-(1-nitroso-2- | 16543-55-8 | } |
| | pyrrolidinyl)-, (S)- | | |
| N-Nitrosopiperidine | Piperidine, 1-mitroso- | 100-75-4 | U179 |
| N-Nitrosopyrrolidine | Pyrrolidine, 1-mitroso- | 930-55-2 | U130 |
| N-Nitrososarcosine | Glycine, N-methyl-N-mitroso- | 13256-22-9 |) |
| 5-Nitro-o-toluidine | Benzenamine, 2-methyl-5-nitro- | 99-55-8 | U131 |
| OctamethyTpyrophosphonamide | Diphosphoramide, octamethyl- | 152-16-9 | P085 |
| Osmium tetroxide | Osmium oxide OsO ₄ , (T-4) | 20816-12-0 | 2087 |
| Panaldehyde | 1,3,5-Trioxane, 2,4,6-trimethyl- | 123-63-7 | U182 |
| Parathion | Phosphorothioic acid, 0,0-diethy1 0- | 56-38-2 | P089 |
| | (4-nitrophenyl) ester | | |
| Pentachlorobenzene | Benzene, pentachloro- | 608-93-5 | J183 |
| Pentachlorodibenzo-p-dioxins | | | |
| Pentachlorodibenzofurans | | | |
| Pentachloroethane | Ethane, pentachloro- | 76-01-7 | U134 |
| Pentachloronitrobenzene (PCN3) | Benzene, pentachloronitro- | 32 -63 -8 | U135 |
| Pentachlorophenol | Phenol, pentachloro- | 87 - 86-5 | See F027 |
| Phenacetin | Acetamide, N-(4-ethoxyphenyl)- | 62 -44 - 2 | U187 |
| | | | |

| Phenol | Same | 108-95-2 | J188 |
|-----------------------------------|---------------------------------------|-------------|---------------|
| Phenylenediamine | Benzenediamine | 25265-76-3 | |
| Phenylmercury acetate | Mencury, (acetato-0)pheny1+ | 62 - 38 - 4 | 2092 |
| Phenylthiourea | Thiourea, phenyl- | 103-85-5 | P093 |
| Phosgene | Carbonic dichloride | 75-44-5 | ₽095 |
| Phosphine | Same | 7803-51-2 | P 09 6 |
| Phorate | Phosphorodithibic acid, 0,0-diethy1 | 298-02-2 | 2094 |
| | S-[(ethylthio)methyl] ester | | |
| Phthalic acid esters, N.J.S. | | | |
| Pnthalic anhydride | 1,3-Isobenzofurandione | 85-44-9 | J190 |
| 2-Picoline | Pyridine, 2-methyl- | 109-06-8 | U191 |
| Polychlorinated biphenyls, N.O.S. | | | |
| Potassium cyanide | Same | 151-50-8 | P098 |
| Potassium silver cyanide | Argentate(1-), bis(cyano-0)-, | 506-61-5 | P099 |
| | potassium) | | |
| Pronamide | Benzamide, 3,5-dichloro-N-(1,1- | 23950-58- | U192 |
| | dimethyl-2-propynyl)- | 5 | |
| 1,3-Propane sultone | 1,2-0xathiolane, 2,2-dioxide | 1120-71-4 | U193 |
| n-Propylamine | 1-Propanamine | 107-10-8 | U194 |
| Propargyl alcohol | 2-Propy n-1-c1 | 107-19-7 | P102 |
| Propylene dichloride | Propane, 1,2-dichloro- | 78-87-5 | U083 |
| 1,2-Propylenimine | Aziridine, 2-methyl- | 75-55-3 | ₽067 |
| Propylthiouracil | 4(1H)-Pyrimidinone, 2,3-dinydro-6- | 51 -52 -5 | |
| | propy1-2-thioxo- | | |
| Pyridine | Same | 110-85-1 | U196 |
| Reserpine | Yohimban-16-carboxylic acid, II, 17- | 50-55-5 | U200 |
| | dimethoxy-18-[(3, 4, 5- | | |
| | trimethoxybenzoy?)oxy3-, methyl | | |
| | ester, (3 beta, 16 beta, 17 alpha, 18 | | |
| | beta, 20 alpha)-, | | |
| Resorcinol | 1,3-Benzenediol | 108-46-3 | U201 |
| Saccharin | 1,2-Benzisothiazol-3(2H)-one, 1,1- | 81-07-2 | บ 20 2 |
| | dioxide | | |
| Saccharin salts | | | U202 |
| Safrole | 1,3-Benzodioxole, 5-(2-propenyl)- | 94-59-7 | U203 |
| Selenium | Same | 7782-49-2 | |
| Selenium compounds, N.O.S. | | | |
| Selenium dioxide | Selenious acid | 7783-00-8 | |
| Selenium sulfide | Selenium sulfide SeS ₂ | 7488-56-4 | |
| Selenourea | Same | 630-10-4 | P103 |
| Silver | Same | 7440-22-4 | |
| Silver compounds, N.O.S. | | | |
| Silver cyanide | Silver cyanide AgCN | 506-64-9 | P104 |
| Silvex (2,4,5-TP) | Propanoic acid, 2-(2,4,5- | 93-72-1 | See F027 |
| | trichlorophenoxy)- | | |
| Sodium cyanide | Sodium cyanide NaCN | 143-33-9 | P106 |
| Streptozotocin | D-Glucose, 2-deoxy-2- | 18883-66- | U206 |
| | [[methylnitrosoamino)carbonyl]amino]- | 4 | |

| Strychnine Strychnine salts | Strychnidin-10-one | 57-24-9 Pl08 Pl06 | |
|--|---|----------------------|-----|
| TCDD | Dibenzo[b,e][1,4]dioxin, 2,3,7,8- tetrachloro- | 1746-01-6 | |
| 1,2,4,5-Tetrachlorobenzene Tetrachlorodibenzo-p-dioxins Tetrachlorodibenzofurans | Benzene, 1,2,4,5-tetrachloro- | 95-94-3 U207 | |
| Tetrachloroethane, N.G.S. | Ethane, tetrachloro-, N.O.S. | 25322-20-7 | |
| 1,1,1,2-Tetrachloroethane | Ethane, 1,1,1,2-tetrachloro- | 630-20-6 U208 | |
| 1,1,2,2-Tetrachloroethane | Etnane, 1,1,2,2-tetrachloro- | 79-34-5 0209 | |
| Tetrachloroethylene | Ethene, tetrachloro- | 127-18-4 U210 | |
| 2,3,4,6-Tetrachlorophenol | Phenol, 2,3,4,5-tetrachloro- | 58-90-2 See F0 | 127 |
| Tetraethy 1dithiopyrophosphate | Thiodiphosphoric acid, tetraethyl ester | 3689-24-5 P109 | |
| Tetraethyl lead | Plumbane, tetraethyl- | 78-00-2 P110 | |
| Tetraethylpyrophosphate | Diphosphoric acid, tetraethyl ester | 107-49-3 P111 | |
| Tetranitromethane | Methane, tetranitro- | 509-14-8 P112 | |
| Thallium | Same | 7440-28-0 | |
| Thallium compounds | | | |
| Thallic oxide | Thallium oxide ${ m Tl}_2{ m O}_3$ | 1314-32-5 P113 | |
| Thallium (I) acetate | Acetic acid, thallium (1+) sait | 563-68-8 U214 | |
| Thallium (I) carbonate | Carbonic acid, dithallium (I+) salt | 6533-73-9 U215 | |
| Thallium (I) chloride | Thallium chloride T1C1 | 7791-12-0 U216 | |
| Thallium (I) nitrate | Nitric acid, thallium (1+) salt | 10102-45-1 U217 | |
| Thallium selenite | Selenious acid, dithallium (1+) salt | 12039-52-0 P114 | |
| Thallium (I) sulfate | Sulfuric acid, dithallium (1+) salt | 7446-18-6 P115 | |
| Thioacetamide | Ethanethioamide | 62 -55-5 U218 | |
| Thiofanox | 2-Butanone, 3,3-dimethyl-l- | 39196-13- PC45 | |
| | (methylthio)-, 0- | 4 | |
| | [(methylamino)carbonyl]oxime | | |
| Thiomethanol | Methanethiol | 74-93-1 0153 | |
| Thiophenol | Ben zeneth iol | 108-98-5 P014 | |
| Thiosemicarbazide | Hydrazinecarbothioamide | 79-19-6 P116 | |
| Thiourea | Same | 52-56-6 P219 | |
| Thiram | Thioperoxydicarbonic diamide | 137-26-8 0244 | |
| | $[(H_2H)C(S)]_2S_2$, tetramethy1+ | | |
| Toluene | Benzene, methyl- | 108-88-3 U220 | |
| Toluenediamine | Benzenediamine, ar-methyl- | 25376-45-8 U221 | |
| Toluene-2,4-diamine | 1,3-Benzenediamine, 4-methyl- | 95-80-7 | |
| Toluane-2,6-diamine | 1,3-Benzenediamine, 2-methyl- | 823-40-5 | |
| Toluene-3,4-diamine | 1,2-Benzenediamine, 4-methyl- | 495-72-0 | |
| Toluene diisocyanate | Benzene, 1,3-diisocyanatomethyl- | 26471-62-5 U223 | |
| o-Toluidine | Benzenamine, 2-methy1- | 95-53-4 0323 | |
| o-Toluidine hydrochloride | Benzeneamine, 2-methyl-, hydrochloride | 636-21-5 0222 | |
| p-Toluidine | Benzenamine, 4-methyl- | 106-49-0 0353 | |

| Toxaphene | Same | 8001-35-2 | P123 |
|-------------------------------------|---|-------------|----------|
| 1,2,4-Trichlorobenzene | Benzene, 1,2,4-trichloro- | 120-82-1 | |
| 1,1,2-Trichloroethane | Ethane, 1,1,2-trichloro- | 79-00-5 | J227 |
| Trichloroethylene | Ethere, trichloro- | 79-01-6 | J228 |
| Trichloromethanethiol | Methanethiol, trichlors- | 75-70-7 | D118 |
| Trichloromonofluoromethane | Methane, trichlorofluoro- | 75-69-4 | U121 |
| 2,4,5-Trichlorophenol | Pnenol, 2,4,5-trichloro- | 95-95-4 | See F027 |
| 2,4,6-Trichlorophenol | Phenol, 2,4,6-trichloro- | 38-06-2 | See F027 |
| 2,4,5-7 | Acetic acid, (2,4,5- | 93-76-5 | See F027 |
| | trichlorophenoxy)- | | |
| Trichloropropane, N.O.S. | | 25735-29-9 |) |
| 1,2,3-Trichloropropane | Propane, 1,2,3-trichloro- | 96-18-4 | |
| 0,0,0-Triethyl phosphorothicate | Phosphorothioic acid, 0,0,0-triethy1 ester | 126-68-1 | |
| 1,3,5-Trinitrobenzene | Benzene, 1,3,5-trinitro- | 99-35-4 | U234 |
| Tris(1-aziridiny1)phosphine sulfide | Aziridine, 1,1',1"+ | 52 - 24 - 4 | |
| | phosphinothioylidynetris- | | |
| Tris(2,3-dibromopropy1) phosphate | 1-Propanci, 2,3-dipremo-, phosphate | 126-72-7 | J235 |
| | (3:1) | | |
| Trypan blue | 2,7-Naphthalenedisulforic acid, 3,3'- [(3,3'-dimethy][1,1'-bipheny]]-4,4'- | 72 -57 -1 | J236 |
| | <pre>diy])bis(azo)]bis[5-amino-4-hydroxy-, tetrasodium salt</pre> | | |
| Uracil mustard | 2,4-(1H,3H)-Pyrimidinedione, 5- [bis(2-chloroethyl)emino]- | 66-75-1 | J237 |
| Vanadium pentoxide | Vanadium oxide $V_{2}0_{5}$ | 1314-52-1 | 2120 |
| Vinyl chloride | Ethene, chloro- | 75-01-4 | U043 |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3- (3-oxo-1-pheny!buty1)-, when present | 81 -81 -2 | U248 |
| | at concentrations less than 0.3%. | | |
| Warfarin | 2H-1-Benzopyran-2-one, 4-hydroxy-3- (3-oxo-1-phenylbutyl)-, when present | 81 -81 -2 | P001 |
| | at concentrations greater than 0.3%. | | |
| Warfarin salts, when present at | | | J248 |
| concentrations less than 0.3%. | | | |
| Warfarin salts, when present at | | | ₽001 |
| concentrations greater than 0.3%. | | | |
| Zinc cyanide | Zinc cyanide Zn(CN) ₂ | 557-21-1 | P121 |
| Zinc phosphide | Zinc phosphide P_2Zn_3 , when present at concentrations greater than 10%. | 1314-84-7 | |
| Zinc phosphide | Zinc phosphide P_2Zn_3 , when present at concentrations of 10% or less. | 1314-84-7 | U249 |
| | | | |

(Source: Amended at 14 Ill. Reg. , effective

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

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 724

STANDARDS FOR OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE AND DISPOSAL FACILITIES

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AJTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (III. Rev. Stat. 1988 Supp., ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R82-19, 53 PCB 131, at 7 III. Reg. 14059, effective October 12, 1983; amended in R84-9 at 9 III. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 III. Reg. 1136, effective January 2, 1986; amended in R86-1 at 10 III. Reg. 14119, effective August 12, 1986; amended in R86-28 at 11 III. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 III. Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 III. Reg. 13577, effective August 4, 1987; amended in R87-5 at 11 III. Reg. 19397, effective November 12, 1987; amended in R87-39 at 12 III. Reg. 13135, effective July 29, 1988; amended in R88-16 at 13 III. Reg. 458, effective December 28, 1988; amended in R89-1 at 13 III. Reg. 18527, effective November 13, 1989; amended in R90-2 at 14 III. Reg. , effective

SUBPART B: GENERAL FACILITY STANDARDS

Section 724.113 General Waste Analysis

a) Analysis:

- 1) Before an owner or operator treats, stores or disposes of any hazardous waste, or non-hazardous waste if applicable under Section 724.213(d), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. -At a minimum, this analysis must contain all the information which must be known to treat, store or dispose of the waste in accordance with the requirements of this Part or 35 Ill. Adm. Gode 728, or with the conditions of a permit issued under 35 Ill. Adm. Gode 792, 703 and 705.-
- 2) The analysis may include data developed under 35 Ill. Adm. Code 721, and existing published or documented data on the hazardous waste or on hazardous waste generated from similar processes.
 - BOARD NOTE: For example, the facility's records of analyses performed on the waste before the effective date of these regulations, or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility, may be included in the data base required to comply with subsection (a)(1). The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by subsection (a)(1). If the generator does not supply the information, and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.
- The analysis must be repeated as necessary to ensure that it is accurate and up to date. At a minimum, the analysis must be repeated:

- A) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or non-hazardous waste if applicable under Section 724.213(d), has changed; and
- B) For off-site facilities, when the results of the inspection required in subsection (a)(4) indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.
- 4) The owner or operator of an off-site facility shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.
- b) The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which it will carry out to comply with subsection (a). The owner or operator shall keep this plan at the facility. At a mirimum, the plan must specify:
 - The parameters for which each hazardous waste, or non-hazardous waste if applicable under Section 724.213(d), will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection (a)).
 - 2) The test methods which will be used to test for these parameters.
 - 3) The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:
 - A) One of the sampling methods described in 35 Ill. Adm. Code 721.Appendix A; or
 - 3) An equivalent sampling method.
 - BOARD NOTE: See 35 Ill. Adm. Code 720.121 for related discussion.
 - 4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date.
 - 5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.
 - 6) Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections 724.117, 724.414 and 724.441, and 35 Ill. Adm. Code 728.107. And,

- 7) For surface impoundments exempted from land disposal restrictions under 35 lil. Adm. Code 728.104(a), the procedures and schedules for:
 - A) The sampling of impoundment contents;
 - B) The analysis of test data; and,
 - C) The annual removal of residues which are not delisted under 35 Ill. Adm. Code 720.122 or which exhibit a characteristic of hazardous waste, and either:
 - i) Do not meet applicable treatment standards of 35 Ill. Adm. Code 728.Subpart D; or
 - ii) Where no treatment standards have been established: Such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.132 or 728.139; or such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.133(f).
- c) For off-site facilities, the waste analysis plan required in subsection (b) must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:
 - 1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and
 - 2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

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

(Source: Amended at 14 Ill. Reg. effective

SUBPART G: CLOSURE AND POST-CLOSURE

Section 724.212 Closure Plan; Amendment of Plan

- a) Written Plan.
 - The owner or operator of a hazardous waste management facility shall have a written closure plan. In addition, certain surface impoundments and waste piles from which the owner or operator intends to remove or decontaminate the hazardous waste at partial or final closure are required by Sections 724.328(c)(1)(A) and 724.358(c)(1)(A) to have contingent closure

plans. The plan must be submitted with the permit application, in accordance with 35 Ill. Adm. Code 703.183, and approved by the Agency as part of the permit issuance proceeding under 35 Ill. Adm. Code 705. In accordance with 35 Ill. Adm. Code 703.241, the approved closure plan will become a condition of any RCRA permit.

- The Agency's approval of the plan must ensure that the approved closure plan is consistent with Sections 724.211 through 724.215 and the applicable requirements of Sections 724.190 et seq., 724.278, 724.297, 724.328, 724.358, 724.380, 724.410, 724.451 and 724.701. Until final closure is completed and certified in accordance with Section 724.215, a copy of the approved plan and all approved revisions must be furnished to the Agency upon request, including request by mail.
- b) Content of plan. The plan must identify steps necessary to perform partial or final closure of the facility at any point during its active life. The closure plan must include, at least:
 - 1) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 724.211;
 - 2) A description of how final closure of the facility will be conducted in accordance with Section 724.211. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and
 - An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing or disposing of all hazardous wastes, and identification of the type(s) of off-site hazardous waste management units to be used, if applicable; and
 - 4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure, including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination required to satisfy the closure performance standard; and
 - 5) A detailed description of other activities necessary during the closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; and
 - 6) A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each

hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat and dispose of all hazardous waste inventory and of the time required to place a final cover must be included.)

- 7) For facilities that use trust funds to establish financial assurance under Section 724.243 or 724.245 and that are expected to close prior to the expiration of the permit, an estimate of the expected year of final closure.
- Amendment of the plan. The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in operating plans, facility design or the approved closure plan in accordance with the applicable procedures in 35 Ill. Adm. Code 702, 703 and 705. The written notification or request must include a copy of the amended closure plan for review or approval by the Agency.
 - 1) The owner or operator may submit a written notification or request to the Agency for a permit modification to amend the closure plan at any time prior to notification of partial or final closure of the facility.
 - 2) The owner or operator shall submit a written notification of or request for a permit modification to authorize a change in the approved closure plan whenever:
 - A) Changes in operating plans or facility design affect the closure plan, or
 - B) There is a change in the expected year of closure, if applicable.
 - C) In conducting partial or final closure activities, unexpected events require modification of the approved closure plan.
 - 3) The owner or operator shall submit a written request for a permit modification including a copy of the amended closure plan for approval at least 60 days prior to the proposed change in the facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall request a permit modification no later than 30 days after the unexpected event. An owner or operator of a surface impoundment or waste pile that intends to remove all hazardous waste at closure and is not otherwise required to prepare a contingent closure plan under Sections 724.323(c)(1)(A) or 724.358(c)(1)(A), shall submit an amended closure plan to the Agency no later than 60 days after the date the owner or operator or Agency determines that the hazardous waste management unit must be closed as a landfill,

subject to the requirements of Section 724.410, or no later than 30 days after that date if the determination is made during partial or final closure. The Agency shall approve, disapprove or modify this amended plan in accordance with the procedures in 35 Ill. Adm. Code 702, 703 and 705. In accordance with 35 Ill. Adm. Code 702.160 and 703.241, the approved closure plan will become a condition of any RCRA permit issued.

- The Agency may request modifications to the plan under the conditions described in Section 724.212(c)(2). The owner or operator shall submit the modified plan within 60 days after the Agency's request, or within 30 days if the change in facility conditions occurs during partial or final closure. Any modifications requested by the Agency -shall-must be approved in accordance with the procedures in 35 lll. Adm. Code 702, 703 and 705.
- d) Notification of partial closure and final closure.
 - 1) The owner or operator shall notify tre Agency in writing at least 60 days prior to the date on which the owner or operator expects to begin closure of a surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only treatment or storage tanks, container storage, or incinerator units to be closed.
 - 2) The date when the owner or operator "expects to begin closure" must be either:
 - A)Nno later than 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit demonstrates to the Agency that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and that the owner and operator have taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Agency shall approve an extension to this one-year limit. Or,
 - B) For units meeting the requirements of Section 724.213(o), no later than 30 days after the date on which the hazardous waste management unit receives the final known volume of non-hazardous wastes, or, if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one

year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator of demonstrates to the Agency that the nazardous waste management unit has the capacity to receive additional non-hazardous wastes and that the owner and operator have taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable permit requirements, the Agency shall approve an extension to this one-year limit.

- 3) If the facility's permit is terminated, or if the facility is otherwise ordered, by judicial decree or Board order to cease receiving hazardous wastes or to close, then the requirements of this subsection do not apply. However, the owner or operator shall close the facility in accordance with the deadlines established in Section 724.213.
- e) Removal of wastes and decontamination or dismantling of equipment. Nothing in this Section shall preclude the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(Source: Amended at 14 Ill. Reg. , effective Section 724.213 Closure; Time Allowed for Closure

a) All permits -shall-must require that, within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e), at a hazardous waste management unit or facility, the owner or operator treat, remove from the unit or facility, or dispose of on-site, all hazardous wastes in accordance with the approved closure plan, unless the owner or operator makes the following demonstration by way of permit application or modification application. The Agency shall approve a longer period if the owner or operator demonstrates that:

1) Either:

A) The activities required to comply with this subsection will, of necessity, take longer than 90 days to complete; or

B) All of the following:

i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes, if the owner or operator complies with subsections (d) and (e); and

- ii) There is a reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or facility within one year; and
- iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- The owner or operator has taken and will continue to take all steps to prevent threats to numan health and the environment, including compliance with all applicable permit requirements.
- All permits -shall-must require that the owner or operator complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all applicable requirements in subsections (a) arc (e), at the hazardous waste management unit or facility, unless the owner or operator makes the following demonstration by way of permit application or modification application. The Agency shall approve a longer closure period if the owner or operator demonstrates that:

1) Either:

- A) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or
- B) All of the following:
 - i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or has the capacity to receive non-hazardous wastes, if the owner or operator complies with subsections (d) and (e); and,
 - ii) There is reasonable likelihood that the owner or operator or another person will recommence operation of the hazardous waste management unit or facility within one year; and
 - iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2) The owner and operator have taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility including compliance with all applicable permit requirements.
- c) The demonstrations referred to in subsections (a)(1) and (b)(1) -shall-must be made as follows:

- 1) The demonstration in subsection (a)(1) must-shall- be made at least 30 days prior to the expiration of the 90-day period in subsection (a); and
- 2) The demonstration in subsection (b)(1) must-shall-be made at least 30 days prior to the expiration of the 180-day period in subsection (b), unless the owner or operator is otherwise subject to deadlines in subsection (d).
- Continued receipt of non-nazardous waste. The Agency snall permit an owner or operator to receive only non-hazardous wastes in a landfill, land treatment unit or surface impoundment unit after the final receipt of hazardous wastes at that unit if:
 - The owner or operator requests a permit modification in compliance with all applicable requirements in 35 Ill. Adm. Code 702, 703 and 705, and in the permit modification request demonstrates that:
 - A) The unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes; and
 - B) There is a reasonable likelihood that the owner or operator or another person will receive non-hazardous wastes in the unit within one year after the final receipt of hazardous wastes; and
 - The non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating pequirements of the unit or facility under this Part; and
 - D) Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and
 - E) The owner or operator is operating and will continue to operate in compliance with all applicable permit requirements; and
 - The request to modify the permit includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under 35 Ill. Adm. Code 703.186, and closure and post-closure plans and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of nazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable under Section 724.212(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of hazardous wastes; and

- The request to modify the permit includes revisions, as necessary and appropriate, to affected conditions of the permit to account for the receipt of non-hazardous wastes following receipt of the final volume of hazardous wastes; and
- The request to modify the permit and the demonstrations referred to in subsections (d)(1) and (2) are submitted to the Agency no later than 120 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes at the unit, or no later than 90 days after the effective date of this Section, whichever is later.
- e) Surface impoundments. In addition to the requirements in subsection (d), an owner or operator of a hazardous waste surface impoundment which is not in compliance with the liner and leachate collection system requirements in Section 724.321(c), (d) or (e) shall receive non-hazardous wastes only as authorized by an adjusted standard pursuant to this subsection.
 - 1) The petition for adjusted standard must include:
 - A) A plan for removing hazardous wastes; and
 - B) A contingent corrective measures plan.
 - 2) The removal plan must provide for:
 - A) Removing all hazardous liquids; and
 - B) Removing all hazardous sludges to the extent practicable without impairing the integrity of the liner or liners, if any; and
 - Removal of hazardous wastes no later than 90 days after the final receipt of hazardous wastes. The Board will allow a longer time, if the owner or operator demonstrates:
 - i) That the removal of hazardous wastes will, of necessity, take longer than the alloted period to complete; and
 - ii) That an extension will not pose a threat to human health and the environment.
 - 3) The contingent corrective measures plan:
 - A) Must meet the requirements of a corrective action plan under Section 724.199, based upon the assumption that a release has been detected from the unit.
 - B) May be a portion of a corrective action plan previously submitted under Section 724.199.

- C) May provide for continued receipt of non-hazardous wastes at the unit following a release only if the owner or operator demonstrates that continued receipt of wastes will not impede corrective action.
- D) Must provide for implementation within one year after a release, or within one year after the grant of the adjusted standard, whichever is later.
- Release. A release is a statistically significant increase (or decrease in the case of pH) over background values for detection monitoring parameters or constituents specified in the permit, or over the facility's groundwater protection standard at the point of compliance, if applicable, detected in accordance with the requirements in Subpart F.
- 5) In the event of a release, the owner or operator of the unit:
 - A) Within 35 days, file with the Board a petition for adjusted standard. If the Board finds that it is necessary to do so in order to protect human health and the environment, the Board will modify the adjusted standard to require the owner or operator to:
 - i) Begin to implement the corrective measures plan in less than one year; or,
 - ii) Cease the receipt of wastes until the plan has been implemented.
 - The Board will retain jurisdiction or condition the adjusted standard so as to require the filing of a new petition to address any required closure pursuant to subsection (e)(7).
 - B) Shall implement the contingent corrective measures plan.
 - May continue to receive wastes at the unit if authorized by the approved contingent measures plan.
- 6) Semi-annual report. During the period of corrective action, the owner or operator shall provide semi-annual reports to the Agency which:
 - A) Describe the progress of the corrective action program;
 - B) Compile all groundwater monitoring data; and
 - Evaluate the effect of the continued receipt of nonhazardous wastes on the effectiveness of the corrective action.
- 7) Required closure. The owner or operator shall commence closure of the unit in accordance with the closure plan and the

requirements of this Part if the Board terminates the adjusted standard, or if the adjusted standard terminates pursuant to its terms.

- A) The Board will terminate the adjusted standard if the owner or operator failed to implement corrective action measures in accordance with the approved contingent corrective measures plan; or
- The Board will terminate the adjusted standard if the owner or operator fails to make substantial progress in implementing the corrective measures plan and achieving the facility's groundwater protection standard, or background levels if the facility has not yet established a groundwater protection standard; or
- C) The adjusted standard will automatically terminate if the owner or operator fails to implement the removal plan.
- D) The adjusted standard will automatically terminate if the owner or operator fails to timely file a required petition for adjusted standard.
- 8) Adjusted standard procedures. The following procedures must be used in granting, modifying or terminating an adjusted standard pursuant to this subsection.
 - A) Except as otherwise provided, the owner or operator shall follow the procedures of 35 lll. Adm. Code 106.Subpart G to petition the Board for an adjusted standard.
 - B) Initial justification. The Board will grant an adjusted standard pursuant to subsection (e)(1) if the owner or operator demonstrates that the removal plan and contingent corrective measures plans meet the requirements of subsections (e)(2) and (3).
 - $\frac{C)}{A}$ The Board will include the following conditions in granting an adjusted standard pursuant to subsection (e)(1):
 - i) A plan for removing hazardous wastes.
 - <u>A requirement that the owner or operator remove</u> hazardous wastes in accordance with the plan.
 - iii) A contingent corrective measures plan.
 - A requirement that, in the event of a release, the owner or operator shall: within 35 days, file with the Board a petition for adjusted standard; implement the corrective measures plan; and, file semi-annual reports with the Agency.
 - v) A condition that the adjusted standard will terminate

- if the owner or operator fails to: implement the removal plan; or, timely file a required petition for adjusted standard.
- vi) A requirement that, in the event the adjusted standard is terminated, the owner or operator shall commence closure of the unit in accordance with the requirements of the closure plan and this Part.
- D) Justification in the event of a release. The Board will modify or terminate the adjusted standard pursuant to a petition filed under subsection (e)(5)(A) as provided in that subsection or in subsection (e)(7).
- 9) The Agency shall modify the RCRA permit to include the adjusted standard.
- 10) The owner or operator may file a permit modification application with a revised closure plan within 15 days after an adjusted standard is terminated.

(Source: Amended at 14 Ill. Reg. , effective

SUBPART H: FINANCIAL REQUIREMENTS

Section 724.242 Cost Estimate for Closure

- a) The owner or operator shall have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections 724.211 through 724.215 and applicable closure requirements in Sections 724.276, 724.297, 724.328, 724.358, 724.380, 724.410, 724.451 and 724.701 through 724.703.
 - 1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see Section 724.212(b)); and
 - 2) The closure cost estimate must be based on the costs to the owner or operator of hiring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of parent corporation in Section 724.241(d)). The owner or operator may use costs for on-site disposal if the owner or operator -ean- demonstrates that on-site disposal capacity will exist at all times over the life of the facility.
 - The closure cost estimate must not incorporate any salvage value that may be realized with the sale of hazardous wastes, or non-hazardous wastes if applicable under Section 724.213(d), facility structures or equipment, land or other assets associated with the facility at the time of partial or final closure.

- 4) The owner or operator shall not incorporate a zero cost for hazardous wastes, or non-hazardous wastes if applicable under Section 724.213(d), that might have economic value.
- During the active life of the facility, the owner or operator shall adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with Section 724.243. For owners and operators using the financial test or corporate guarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Agency as specified in Section 724.243(f)(3). The adjustment may be made by recalculating the maximum costs of closure in current dollars, or by using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business as specified in subsections (b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.
 - The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.
 - Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.
- c) During the active life of the facility the owner or operator shall revise the closure cost estimate no later than 30 days after the Agency has approved the request to modify the closure plan, if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in Section 724.242(b).
- d) The owner or operator shall keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with Sections 724.242(a) and (c) and, when this estimate has been adjusted in accordance with Section 724.242(b), the latest adjusted closure cost estimate.

(Source: Amended at 14 Ill. Reg. , effective

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

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1022.4 and 1027).
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SOURCE: Adopted in R81-22, 43 PCB 427, at 5 III. Reg. 9781, effective as noted in 35 III. Adm. Code 700.106; amended and codeffed in P81-22, 45 PCB 377, at 6 III. Reg. 4628, effective as noted in 35 III. Adm. Code 700.106;

amended in R82-18, 51 PCB 831, at 7 Ill. Reg. 2518, effective February 22, 1983; amended in R82-19, 53 PCB 131, 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. 1338, 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. , effective

SUBPART B: GENERAL FACILITY STANDARDS

Section 725.113 General Waste Analysis

- a) Waste analysis:
 - 1) Before an owner or operator treats, stores or disposes of any hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. -At a minimum, this analysis must contain all the information which must be known to treat, store or dispose of the waste in accordance with the requirements of this Part and 35 lil. Adm. Code 728.-
 - The analysis may include data developed under 35 Ill. Adm. Code 721 and existing published or documented data on the hazardous waste or on waste generated from similar processes.
 - BOARD NOTE: For example, the facility's record of analyses performed on the waste before the effective date of these regulations or studies conducted on hazardous waste generated from processes similar to that which generated the waste to be managed at the facility may be included in the data base required to comply with subsection (a)(1). The owner or operator of an off-site facility may arrange for the generator of the hazardous waste to supply part or all of the information required by subsection (a)(1). If the generator does not supply the information and the owner or operator chooses to accept a hazardous waste, the owner or operator is responsible for obtaining the information required to comply with this Section.
 - The analysis must be repeated as necessary to -insure-ensure that it is accurate and -up-te-date-up to date. At a minimum, the analysis must be repeated:
 - A) When the owner or operator is notified, or has reason to believe, that the process or operation generating the hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), has changed; and

- B) For off-site facilities, when the results of the inspection required in subsection (a)(4) indicate that the hazardous waste received at the facility does not match the waste designated on the accompanying manifest or shipping paper.
- 4) The owner or operator of an off-site facility shall inspect and, if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest or shipping paper.
- The owner or operator shall develop and follow a written waste analysis plan which describes the procedures which the owner or operator will carry out to comply with subsection (a). The owner or operator shall keep this plan at the facility. At a minimum, the plan must specify:
 - The parameters for which each hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with subsection (a).
 - 2) The test methods which will be used to test for these parameters.
 - The sampling method which will be used to obtain a representative sample of the waste to be analyzed. A representative sample may be obtained using either:
 - A) One of the sampling methods described in 35 Ill. Adm. Code 721.Appendix A or
 - B) An equivalent sampling method.
 - BOARD NOTE: See 35 Ill. Adm. Code 720.120(c) for related discussion.
 - 4) The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up-to-date.
 - 5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.
 - Where applicable, the methods which will be used to meet the additional waste analysis requirements for specific waste management methods as specified in Sections 725.293, 725.325, 725.352, 725.373, 725.414, 725.441, 725.475 and 725.502, and 35 Ill. Adm. Code 728.107. And,
 - 7) To: surface impoundments exempted arom land disposal restrictions under 35 DH. Adm. Lode 728.104(a), the procedures

and schedules for:

- A) The sampling of impounament contents;
- B) The analysis of test data; and,
- C) The annual removal of residues which are not delisted under 35 Ill. Adm. Code 720.122 or which exhibit a characteristic of hazardous waste, and either:
 - Do not meet applicable treatment standards of 35 Ill. Acm. Code 728.Subpart D: or
 - ii) Where no treatment standards have been established: Such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.132 or 728.139; or such residues are prohibited from land disposal under 35 Ill. Adm. Code 728.133(f).
- c) For off-site facilities, the waste analysis plan required in subsection (b) must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. At a minimum, the plan must describe:
 - 1) The procedures which will be used to determine the identity of each movement of waste managed at the facility; and
 - 2) The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling.

(Source: Amended at 14 Ill. Reg. , effective

SUBPART G: CLOSURE AND POST-CLOSURE

Section 725.212 Closure Plan; Amendment of Plan

- a) Written plan. The owner or operator of a hazardous waste management facility shall have a written closure plan. Until final closure is completed and certified in accordance with Section 725.215, a copy of the most current plan must be furnished to the Agency upon request including request by mail. In addition, for facilities without approved plans, it must also be provided during site inspections on the day of inspection to any officer, employee or representative of the Agency.
- b) Content of plan. The plan must identify the steps necessary to perform partial or final closure of the facility at any point during its active life. The closure plan must include, at least:
 - 1) A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 725.211; and

- 2) A description of how final closure of the facility will be conducted in accordance with Section 725.211. The description must identify the maximum extent of the operation which will be unclosed during the active life of the facility and
- An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial and final closure, including, but not limited to methods for removing, transporting, treating, storing or disposing of all nazardous waste, and identification of and the type(s) of off-site hazardous waste management unit(s) to be used, if applicable; and
- 4) A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures and soils during partial and final closure including, but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils and criteria for determining the extent of decontamination necessary to satisfy the closure performance standard; and
- A detailed description of other activities necessary during the partial and final closure period to ensure that all partial closures and final closure satisfy the closure performance standards, including, but not limited to, groundwater monitoring, leachate collection, and run-on and run-off control; and
- A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included; and
- 7) An estimate of the expected year of final closure for facilities that use trust funds to demonstrate financial assurance under Sections 725.243 or 725.245 and whose remaining operating life is less than twenty years, and for facilities without approved closure plans.
- c) Amendment of plan. The owner or operator may amend the closure plan at any time prior to the notification of partial or final closure of the facility. An owner or operator with an approved closure plan shall submit a written request to the Agency to authorize a change to the approved closure plan. The written request must include a copy of the amended closure plan for approved by the Agency.

- 1) The owner or operator shall amend the closure plan, whenever:
 - A) $-\epsilon$ -Changes in the operating plans or facility design affect the closure plan, or
 - B) -w-Whenever there is a change in the expected year of closure ,if applicable, or
 - C) In conducting partial or final closure activities, unexpected events require a modification of the closure plan.
- The owner or operator shall amend the closure plan at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event occurs during the partial or final closure period, the owner or operator shall amend the closure plan no later than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure, but are required to close as landfills in accordance with Section 725.410.
- An owner or operator with an approved closure plan shall submit the modified plan to the Agency at least 60 days prior to the proposed change in facility design or operation, or no more than 60 days after an unexpected event has occurred which has affected the closure plan. If an unexpected event has occurred during the partial or final closure period, the owner or operator shall submit the modified plan no more than 30 days after the unexpected event. These provisions also apply to owners or operators of surface impoundments and waste piles who intended to remove all hazardous wastes at closure but are required to close as landfills in accordance with Section 725.410. If the amendment to the plan is a Class 2 or 3 modification according to the criteria in 35 Ill. Adm. Code 703.280, the modification to the plan shall be approved according to the procedures in subsection (d)(4)
- The Agency may request modifications to the plan under the conditions described in subsection (c)(1). An owner or operator with an approved closure plan shall submit the modified plan within 60 days of the request from the Agency, or within 30 days if the unexpected event occurs during partial or final closure. If the amendment is considered a Class 2 or 3 modification according to the criteria in 35 Ill. Adm. Code 703.280, the modification to the plan -shall-must be approved in accordance with the procedures in subsection (d)(4).
- d) Notification of partial closure and final closure.
 - 1) The owner or operator shall submit the closure plan to the Agency at least 180 days prior to the date on which the owner or

operator expects to begin closure of the first surface impoundment, waste pile, land treatment or landfill unit, or final closure of a facility with such a unit. The owner or operator shall submit the closure plan to the Agency at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only tanks, container storage or incinerator units. Owners or operators with approved closure plans shall notify the Agency in writing at least 60 days prior to the date on which the owner or operator expects to begin closure of a surface impoundment, waste pile, landfill or land treatment unit, or final closure of a facility involving such a unit. Owners and operators with approved closure plans shall notify the Agency in writing at least 45 days prior to the date on which the owner or operator expects to begin final closure of a facility with only tanks, container storage or incinerator units.

- 2) The date when the owner or operator "expects to begin closure" must be either:
 - A) W-w-ithin 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit demonstrates to the Agency that the hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and that the owner or operator has taken and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the Agency shall approve an extension to this one-year limit-*-; or
 - B) For units meeting the requirements of Section 725.213(d), no later than 30 days after the date on which the hazardous waste management unit receives the final known volume of non-hazardous wastes, or, if there is a reasonable possibility that the hazardous waste management unit will receive additional non-hazardous wastes, no later than one year after the date on which the unit received the most recent volume of non-hazardous wastes. If the owner or operator demonstrates to the Agency that the hazardous waste management unit has the capacity to receive additional non-hazardous wastes and that the owner and operator have taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all applicable interim status requirements, the Agency shall approve an extension to this one-year limit
- The owner propperator shall submit the cloudre plan to the

Agency no later than 15 days after:

- A) Termination of interim status (except when a permit is issued to the facility simultaneously with termination of interim status); or
- B) Issuance of a judicial decreeor Board order to cease receiving hazardous wastes or close.
- The Agency shall provide the owner or operator and the public, 4) through a newspaper notice, the opportunity to submit written comments on the plan and request modifications of the plan no later than 30 days from the date of the notice. The Agency small also, in response to a request or at its own discretion, hold a public hearing whenever such a hearing might clarify one or more issues concerning a closure plan. The Agency shall give public notice of the hearing at least 30 days before it occurs. (Public notice of the hearing may be given at the same time as notice of the opportunity for the public to submit written comments and the two notices may be combined.) The Agency shall approve, modify or disapprove the plan within 90 days of its receipt. If the Agency does not approve the plan, the Agency shall provide the owner or operator with a detailed written statement of reasons for the refusal, and the owner or operator shall modify the plan or submit a new plan for approval within 30 days after receiving such written statement. The Agency shall approve or modify this plan in writing within 60 days. If the Agency modifies the plan, this modified plan becomes the approved closure plan. The Agency shall assure that the approved plan is consistent with Sections 725.211 through 725.215 and the applicable requirements of Sections 725.190 et seq., 725.297, 725.328, 725.358, 725.380, 725.410, 725.451, 725.481 and 725.504. A copy of this modified plan with a detailed statement of reasons for the modifications must be mailed to the owner or operator.
- e) Removal of wastes and decontamination or dismantling of equipment. Nothing in this Section precludes the owner or operator from removing hazardous wastes and decontaminating or dismantling equipment in accordance with the approved partial or final closure plan at any time before or after notification of partial or final closure.

(Source: Amended at 14 Ill. Reg. , effective

Section 725.213 Closure; Time Allowed for Closure

a) Within 90 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e), at a hazardous waste management unit or facility, or 90 days after approval of the closure plan, whichever is later, the owner or operator shall treat, remove from the unit or facility or dispose of on-site, all hazardous wastes in accordance with the approved closure plan. The Agency shall approve a longer period if the owner or

operator demonstrates that:

1) Either:

- A) The activities required to comply with this paragraph will, of necessity, take longer than 90 days to complete; or
- B) All of the following:
 - The hazardous waste management unit or facility has the capacity to receive additional nazardous wastes, or has the capacity to receive non-hazardous wastes, if the owner or operator complies with subsections (d) and (e);
 - ii) There is a reasonable likelihood that the owner or operator, or another person will recommence operation of the hazardous waste management unit or facility within one year; and
 - iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2) The owner and operator have taken and will continue to take all steps to prevent threats to human health and the environment including compliance with all applicable interim status requirements.
- b) The owner or operator shall complete partial and final closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e), at the hazardous waste management unit or facility, or 180 days after approval of the closure plan, if that is later. The Agency shall approve an extension to the closure period if the owner or operator demonstrates that:

1) Either:

- A) The partial or final closure activities will, of necessity, take longer than 180 days to complete; or
- B) All of the following:
 - i) The hazardous waste management unit or facility has the capacity to receive additional hazardous wastes, or the final volume of non-hazardous wastes, if the owner or operator complies with all the applicable requirements of subsections (d) and (e); and
 - (ii) There is a reasonable likelihood that the owner or operator or another person will recommence operation.

- of the hazardous waste management unit or facility within one year; and
- iii) Closure of the hazardous waste management unit or facility would be incompatible with continued operation of the site; and
- 2) The owner and operator have taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but not operating hazardous waste management unit or facility, including compliance with all applicable interim status requirements.
- The demonstration referred to in subsections (a)(1) and (b)(1) must be made as follows:
 - The demonstration in subsection (a)(1) must be made at least 30 days prior to the expiration of the 90-day period in subsection (a); and
 - 2) The demonstrations in subsection (b)(1) must be made at least 30 days prior to the expiration of the 180-day period in subsection (b), unless the owner or operator is otherwise subject to deadlines in subsection (d).
- d) Continued receipt of non-hazardous waste. The Agency shall permit an owner or operator to receive non-hazardous wastes in a landfill, land treatment unit or surface impoundment unit after the final receipt of hazardous wastes at that unit if:
 - The owner or operator submits an amended Part B application, or a new Part B application if none was previously submitted, and demonstrates that:
 - A) The unit has the existing design capacity as indicated on the Part A application to receive non-hazardous wastes; and
 - There is a reasonable likelihood that the owner or operator or another person will receive non-hazardous waste wastes in the unit within one year after the final receipt of hazardous wastes; and
 - The non-hazardous wastes will not be incompatible with any remaining wastes in the unit, or with the facility design and operating requirements of the unit or facility under this Part; and
 - Closure of the hazardous waste management unit would be incompatible with continued operation of the unit or facility; and
 - E) The owner or operator is operating and will continue to operate in compliance with all applicable interim status

requirements; and

- The Part B application includes an amended waste analysis plan, groundwater monitoring and response program, human exposure assessment required under 35 Ill. Adm. Code 703.186 and closure and post-closure plans and updated cost estimates and demonstrations of financial assurance for closure and post-closure care as necessary and appropriate, to reflect any changes due to the presence of hazardous constituents in the non-hazardous wastes, and changes in closure activities, including the expected year of closure if applicable under Section 725.212(b)(7), as a result of the receipt of non-hazardous wastes following the final receipt of nazardous wastes; and
- The Part B application is amended, as necessary and appropriate, to account for the receipt of non-nazardous wastes following receipt of the final volume of hazardous wastes; and
- The Part B application and the demonstrations referred to in subsections (d)(1) and (2) are submitted to the Agency no later than 180 days prior to the date on which the owner or operator of the facility receives the known final volume of hazardous wastes, or no later than 90 days after the effective date of this Section, whichever is later.
- Surface impoundments. In addition to the requirements in subsection (d), an owner or operator of a nazarcous waste surface impoundment which is not in compliance with the liner and leachate collection system requirements in Section 725.321(a) shall receive non-hazardous wastes only as authorized by an adjusted standard pursuant to this subsection.
 - 1) The petition for adjusted standard must include:
 - A) A plan for removing hazardous wastes; and
 - B) A contingent corrective measures plan.
 - 2) The removal plan must provide for:
 - A) Removing all hazardous liquids; and
 - B) Removing all hazardous sludges to the extent practicable without impairing the integrity of the liner or liners, if any; and
 - Removal of hazardous wastes no later than 90 days after the final receipt of hazardous wastes. The Board will allow a longer time, if the owner or operator demonstrates:
 - That the Demon 1 of hearnous waster will, of necessity, take notice than the officero period to complete, and

- <u>That an extension will not pose a threat to human</u> health and the environment.
- 3) The contingent corrective measures plan:
 - A) Must meet the requirements of a corrective action plan under Section 724.199, based upon the assumption that a release has been detected from the unit.
 - B) May be a portion of a corrective action plan previously submitted under Section 724.199.
 - May provice for continued receipt of non-hazardous wastes at the unit following a release only if the owner or operator demonstrates that continued receipt of wastes will not impede corrective action.
 - Must provide for implementation within one year after a release, or within one year after the grant of the adjusted standard, whichever is later.
- Release. A release is a statistically significant increase (or decrease in the case of pH) in hazardous constituents over background levels, detected in accordance with the requirements in Subpart F.
- 5) In the event of a release, the owner or operator of the unit:
 - A) Within 35 days, file with the Board a petition for adjusted standard. If the Board finds that it is necessary to do so in order to protect human health and the environment, the Board will modify the adjusted standard to require the owner or operator to:
 - i) Begin to implement the corrective measures plan in less than one year; or,
 - ii) Cease the receipt of wastes until the plan has been implemented.
 - iii) The Board will retain jurisdiction or condition the adjusted standard so as to require the filing of a new petition to address any required closure pursuant to subsection (e)(7).
 - B) Shall implement the contingent corrective measures plan.
 - May continue to receive wastes at the unit if authorized by the approved contingent measures plan.
- Semi-annual report. During the period of corrective action, the owner or operator shall provide semi-annual reports to the Agency which:

- A) Describe the progress of the corrective action program;
- 3) Compile all groundwater monitoring data; and
- Evaluate the effect of the continued receipt of nonhazardous wastes on the effectiveness of the corrective action.
- Required closure. The owner or operator small commence closure of the unit in accordance with the closure plan and the requirements of this Part if the Board terminates the adjusted standard, or if the adjusted standard terminates pursuant to its terms.
 - A) The Board will terminate the adjusted standard if the owner or operator failed to implement corrective action measures in accordance with the approved contingent corrective measures plan; or
 - B) The Board will terminate the adjusted standard if the owner or operator fails to make substantial progress in implementing the corrective measures plan and achieving the facility's groundwater protection standard, or background levels if the facility has not yet established a groundwater protection standard; or
 - The adjusted standard will automatically terminate if the owner or operator fails to implement the removal plan.
 - The adjusted standard will automatically terminate if the owner or operator fails to timely file a required petition for adjusted standard.
- 8) Adjusted standard procedures. The following procedures must be used in granting, modifying or terminating an adjusted standard pursuant to this subsection.
 - Except as otherwise provided, the owner or operator shall follow the procedures of 35 Ill. Adm. Code 106. Subpart G to petition the Board for an adjusted standard.
 - B) Initial justification. The Board will grant an adjusted standard pursuant to subsection (e)(1) if the owner or operator demonstrates that the removal plan and contingent corrective measures plans meet the requirements of subsections (e)(2) and (3).
 - The Board will include the following conditions in granting an adjusted standard pursuant to subsection (e)(1):
 - i) A plan for removing hazardous wastes.
 - ii) A requirement that the owner or operator remove

hazardous wastes in accordance with the plan.

- iii) A contingent corrective measures plan.
- iv) A requirement that, in the event of a release, the owner or operator shall: within 35 days, file with the Board a petition for adjusted standard; implement the corrective measures plan; and, file semi-annual reports with the Agency.
 - v) A condition that the adjusted standard will terminate if the owner or operator fails to: implement the removal plan; or, timely file a required petition for adjusted standard.
- vi) A requirement that, in the event the adjusted standard is terminated, the owner or operator shall commence closure of the unit in accordance with the requirements of the closure plan and this Part.
- D) Justification in the event of a release. The Board will modify or terminate the adjusted standard pursuant to a petition filed under subsection (e)(5)(A) as provided in that subsection or in subsection (e)(7).
- 9) The owner or operator may file a revised closure plan within 15 days after an adjusted standard is terminated.

(Source: Amended at 14 Ill. Reg. , effective

SUBPART H: FINANCIAL REQUIREMENTS

Section 725.242 Cost Estimate for Closure

- a) The owner or operator shall have a detailed written estimate, in current dollars, of the cost of closing the facility in accordance with the requirements in Sections 725.211 through 725.215 and applicable closure requirements of Sections 725.297, 725.328, 725.358, 725.380, 725.410, 725.451, 725.481 and 725.504.
 - 1) The estimate must equal the cost of final closure at the point in the facility's active life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan (see Section 725.212(b)); and
 - 2) The closure cost estimate must be based on the costs to the owner or operator of niring a third party to close the facility. A third party is a party who is neither a parent nor a subsidiary of the owner or operator. (See definition of "parent corporation" in Section 725.241(d).) The owner or operator may use costs for on-site disposal if the owner or operator -ean -demonstrates that on-site disposal capacity will exist at all times over the life of the facility.

- The closure cost estimate must not incorporate any salvage value that may be realized by the sale of hazardous wastes, or non-hazardous wastes if applicable unger Section 725.213(d), facility structures or equipment, land or other facility assets at the time of partial or final closure.
- 4) The owner or operator shall not incorporate a zero cost for hazardous waste, or non-hazardous waste if applicable under Section 725.213(d), which may have economic value.
- b) During the active life of the facility, the owner or operator shall adjust the closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instruments used to comply with Section 725.243. For owners and operators using the financial test or corporate quarantee, the closure cost estimate must be updated for inflation within 30 days after the close of the firm's fiscal year and before submission of updated information to the Agency as specified in Section 725.243(e)(5). The adjustment may be made by recalculating the closure cost estimate in current dollars, or by using an inflation factor derived from the most recent annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commence in its Survey of Current Business as specified in subsections (b)(1) and (b)(2). The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year.
 - 1) The first adjustment is made by multiplying the closure cost estimate by the inflation factor. The result is the adjusted closure cost estimate.
 - 2) Subsequent adjustments are made by multiplying the latest adjusted closure cost estimate by the latest inflation factor.
- c) During the active life of the facility, the owner or operator shall revise the closure cost estimate no later than 30 days after a revision has been made to the closure plan which increases the cost of closure. If the owner or operator has an approved closure plan, the closure cost estimate must be revised no later than 30 days after the Agency has approved the request to modify the closure plan if the change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in subsection (b).
- d) The owner or operator -must-shall keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with subsections(a) and (c) and, when this estimate has been adjusted in accordance with subsection (b), the latest adjusted closure cost estimate.

(Source: Amended at 14 Ill. Reg. , effective

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

PART 726

STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTE AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES

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Environmental Protection Act (Ill. Rev. Stat. 1988 Supp., ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R35-22 at 10 III. Reg. 1162, effective January 2, 1986; amended in R86-1 at 10 III. Reg. 14156, effective August 12, 1986; amended in R87-26 at 12 III. Reg. 2900, effective January 15, 1988; amended in R89-1 at 13 III. Reg. 18606, effective November 13, 1989; amended in R90-2 at 14 III. Reg. , effective

SUBPART C: RECYCLABLE MATERIALS USED IN A MANNER CONSTITUTING DISPOSAL Section 726.120 Applicability

- a) The regulations of this Subpart apply to recyclable materials that are applied to or placed on the land;
 - 1) Without mixing with any other substance(s); or
 - 2) After mixing or combination with any other substance(s). These materials will be referred to throughout this Subpart as "materials used in a manner that constitutes disposal."
- b) Products produced for the general public's use that are used in a manner that constitutes disposal and that contain recyclable materials are not presently subject to regulation under this Subpart if the recyclable materials have undergone a chemical reaction in the course of producing the products so as to become inseparable by physical means and if such products meet the applicable treatment standards in 35 Ill. Adm. Code 728. Subpart D (or applicable prohibition levels in 35 Ill. Adm. Code 728.132 or 728.139, where no treatment standards have been established) for each recyclable material (i.e. hazardous waste -constituent-) that they contain. Commercial fertilizers that are produced for the general public's use that contain recyclable materials also are not presently subject to regulation, provided they meet the same treatment standards or prohibitions levels for each recyclable material they contain. However, zinc-containing fertilizers using hazardous waste KO61 that are produced for the general public's use -that contain recyclable materials also- are not presently subject to regulation under this Subpart.

(Source: Amended at 14 III. Reg. , effective

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

SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

PART 728 LAND DISPOSAL RESTRICTIONS

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AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1988 Supp., ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R87-5 at 11 Ill. Reg. 19354, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13046, effective July 29, 1988;

amended in R89-1 at 13 III. Reg. 18403, effective November 13, 1989; amended in R89-9 at 14 III. Reg. , effective ; amended in R90-2 at 14 III. Reg. , effective

SUBPART A: GENERAL

Section 728.101 Purpose, Scope and Applicability

- a) This Part identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances under which an otherwise prohibited waste may continue to be land disposed.
- b) Except as specifically provided otherwise in this Part or 35 Ill. Adm. Code 721, the requirements of this Part apply to persons who generate or transport hazardous waste and to owners and operators of hazardous waste treatment, storage and disposal facilities.
- c) -Prehipited-Restricted wastes may continue to be land disposed as follows:
 - 1) Where persons have been granted an extension to the effective date of a prohibition under Subpart C or pursuant to Section 728.105, with respect to those wastes covered by the extension;
 - 2) Where persons have been granted an exemption from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition;
 - 3) Where the waste is generated by small quantity generators of less than 100 kilograms of non-acute hazardous wastes per month or less than one kilogram of acute hazardous waste per month, as defined in 35 lllr Admr Code 721:105: or;
 - 4) Where a farmer is disposing of waste pesticides in accordance with 35 III. Adm. Gode 722.170.
 - Prior to May 8, 1990, in a landfill or surface impoundment unit where all applicable persons are in compliance with the requirements of Section 728.108, with respect to wastes which are not subject to the treatment standards set forth in Subpart D, and which are not subject to the prohibitions in Section 728.132 or 728.139.
- d) This Part does not affect the availability of a waiver under Section 121(d)(4) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (42 U.S.C. 9601 et seq).
- e) The following hazardous wastes are not subject to any provision of this Part:
 - 1) Wastes generated by small quantity generators of less than 100 kg of non-acute hazardous waste or less than 1 kg of acute nazardous waste per month, as detired in 35 lli. Adm. code 721.105;

- 2) Maste pesticides that a farmer disposes of pursuant to 35 Ill. Adm. Code 722.170;
- Wastes identified or listed as hazardous after November 8, 1984, for which USEPA has not promulgated land disposal prohibitions or treatment stangards.
- This Part is cumulative with the land disposal restrictions of 35 Ill. Adm. Code 729. The Environmental Protection Agency (Agency) shall not issue a wastestream authorization pursuant to 35 Ill. Adm. Code 709 or Sections 22.6 or 39(h) of the Environmental Protection Act (Ill. Rev. Stat. 1987, ch. 111 1/2, pars. 1022.6 or 1039(n)) unless the waste meets the requirements of this Part as well as 35 Ill. Adm. Code 729.

(Source: Amended at 14 III. Reg. , effective

Section 728.105 Procedures for case-by-case Extensions to an Effective Date

- a) The Board incorporates by reference 40 CFR 268.5 -(1988), as amended at 53 Fed. Reg. 31211, August 17, 1988-(1989), as amended at 54 Fed. Reg 36970, September 6, 1989. This Part incorporates no future editions or amendments.
- b) Persons may apply to USEPA for extensions of effective dates pursuant to 40 CFR 268.5. Extensions which are granted by USEPA will be deemed extensions of dates specified in the derivative Board rule.

(Source: Amended at 14 Ill. Reg. , effective

Section 728.106 Petitions to Allow Land Disposal of a Waste Prohibited under Subpart C

- a) Any person seeking an exemption from a prohibition under Subpart C for the disposal of a restricted hazardous waste in a particular unit or units shall submit a petition to the Board demonstrating, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous. The demonstration must include the following components:
 - 1) An identification of the specific waste and the specific unit for which the demonstration will be made;
 - 2) A waste analysis to describe fully the chemical and physical characteristics of the subject waste;
 - 3) A comprehensive characterization of the disposal unit site including an analysis of background air, soil and water quality;
 - 4) A monitoring plan which detects migration at the earliest practical time;

- 5) Sufficient information to assure the Agency that the owner or operator of a land disposal unit receiving restricted wastes will comply with other applicable federal, state and local laws;
- 6) Whether the facility is in interim status, or, if a RCRA permit has been issued, the term of the permit.
- b) The demonstration referred to in subsection (a) must meet the following criteria:
 - 1) All waste and environmental sampling, test and analysis data must be accurate and reproducible to the extent that state-of-the-art techniques allow;
 - All sampling, testing and estimation techniques for chemical and physical properties of the waste and all environmental parameters must conform with "Test Methods for Evaluating Solid Waste" and with "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," incorporated by reference in 35 Ill. Adm. Code 720.111.
 - 3) Simulation models must be calibrated for the specific waste and site conditions, and verified for accuracy by comparison with actual measurements;
 - 4) A quality assurance and quality control plan that addresses all aspects of the demonstration and conforms with "Test Methods for Evaluating Solid Waste" and with "Generic Quality Assurance Project Plan for Land Disposal Restrictions Program," incorporated by reference in 35 Ill. Adm. Code 720.111. and
 - An analysis must be performed to identify and quantify any aspects of the demonstration that contribute significantly to uncertainty. This analysis must include an evaluation of the consequences of predictable future events, including, but not limited to, earthquakes, floods, severe storm events, droughts or other natural phenomena.
- c) Each petition referred to in subsection (a) must include the following:
 - 1) A monitoring plan that describes the monitoring program installed at or around the unit to verify continued compliance with the conditions of the adjusted standard. This monitoring plan must provide information on the monitoring of the unit or the environment around the unit. The following specific information must be included in the plan:
 - A) The media monitored in the cases where monitoring of the environment around the unit is required;
 - B) The type of monitoring conducted at the unit, in the cases

where monitoring of the unit is required;

- C) The location of the monitoring stations;
- D) The monitoring interval (frequency of monitoring at each station);
- E) The specific hazardous constituents to be monitored;
- F) The implementation schedule for the monitoring program;
- G) The equipment used at the monitoring stations:
- H) The sampling and analytical techniques employed; and
- I) The data recording and reporting procedures.
- Where applicable, the monitoring program described in subsection (c)(1) must be in place for a period of time specified by the Board, as part of its approval of the petition, prior to receipt of prohibited waste at the unit.
- 3) The monitoring data collected according to the monitoring plan specified under subsection (c)(1) must be sent to the Agency according to a format and schedule specified and approved in the monitoring plan, and
- 4) A copy of the monitoring data collected under the monitoring plan specified under subsection (c)(1) must be kept on-site at the facility in the operating record.
- The monitoring program specified under subsection (c)(1) must meet the the following criteria:
 - A) All sampling, testing and analytical data must be approved by the Board and must provide data that is accurate and reproducible.
 - B) All estimation and monitoring techniques must be approved by the Board.
 - C) A quality assurance and quality control plan addressing all aspects of the monitoring program must be provided to and approved by the Board.
- d) Each petition must be submitted to the Board as provided in 35 Ill. Adm. Code 106.
- e) After a petition has been approved, the owner or operator shall report any changes in conditions at the unit or the environment around the unit that significantly depart from the conditions described in the petition and affect the potential for migration of hazardous constituents from the units as follows:

- 1) If the owner or operator plans to make changes to the unit design, construction or operation, the owner or operator shall, at least 90 days prior to making the change, either:
 - A) File a petition for modification of or a new petition to amend an adjusted standard with the Board reflecting the changes; or,
 - B) Demonstrate to the Agency that the change can be made consistent with the conditions of the existing adjusted standard.
- 2) If the owner or operator discovers that a condition at the site which was modeled or predicted in the petition does not occur as predicted, this change must be reported, in writing, to the Agency within 10 days of discovering the change. The Agency shall determine whether the reported change from the terms of the petition requires further action, which may include termination of waste acceptance, a petition for modification of or a new petition for an adjusted standard.
- f) If there is migration of hazardous constituent(s) from the unit, as determined by the owner or operator, the owner or operator shall:
 - Immediately suspend receipt of -restricted-prohibited waste at the unit, and
 - 2) Notify the Agency, in writing, within 10 days of the determination that a release has occurred.
 - 3) Following receipt of the notification, the Agency shall, within 60 days of receiving notification:
 - A) Determine whether the owner and operator can continue to receive prohibited waste in the unit under the conditions of the adjusted standard.
 - B) If modification or vacation of the adjusted standard is necessary, file a motion to modify or vacate the adjusted standard with the Board.
 - C) Determine whether further examination of any migration is required under the applicable provisions of 35 Ill. Adm. Code 724 or 725.
- g) Each petition must include the following statement signed by the petitioner or an authorized representative:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this petition and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information. I believe that submitted information is true, accurate and complete. I am aware that there are significant

penalties for submitting false information, including the possibility of fine and imprisonment.

- n) After receiving a petition, the Board may request any additional information that may be required to evaluate the demonstration.
- i) If approved, the petition will apply to land disposal of the specific restricted waste at the individual disposal unit described in the demonstration and will not apply to any other restricted waste at that disposal unit, or to that specific restricted waste at any other disposal unit.
- j) The Board will give public notice and provide an opportunity for public comment as provided in 35 Ill. Adm. Code 106. Notice of a final decision on a petition will be published in the Environmental Register.
- k) The term of a petition granted under this Section will be no longer than the term of the RCRA permit if the disposal unit is operating under a RCRA permit, or up to a maximum of 10 years from the date of approval provided under subsection (g) if the unit is operating under interim status. In either case, the term of the granted petition expires upon the termination or denial of a RCRA permit, or upon the termination of interim status or when the volume limit of waste to be land disposed during the term of petition is reached.
- 1) Prior to the Board's decision, the applicant shall comply with all restrictions on land disposal under this Part once the effective date for the waste has been reached.
- m) The petition granted by the Board does not relieve the petitioner of responsibilities in the management of hazardous waste under 35 Ill. Adm. Code 702, 703 and 720 through 726.
- n) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm are not eligible for an adjusted standard under this Section.

(Source: Amended at 14 Ill. Reg. , effective)

Section 728.107 Waste Analysis

- a) Except as specified in Section 728.132 or 728.143, the generator shall test the generator's waste, or test an extract developed using the test method described in Appendix A, or use knowledge of the waste, to determine if the waste is restricted from land disposal under this Part.
 - 1) If a generator determines that the generator is managing a restricted waste under this Part and determines that the waste does not meet the applicable treatment standards set forth in Subpart D or exceeds the applicable prohibition levels set forth in Section 728.132 or 728.139, with each shipment of waste the generator shall notify the treatment or storage facility in

writing of the appropriate treatment standard set forth in Subpart D and any applicable prohibition levels set forth in Section 728.132 or 728.139. The notice must include the following information:

- A) USEPA Hazardous Waste Number;
- B) The corresponding treatment standard and all applicable standards set forth in Section 728.132 or 728.139;
- C) The manifest number associated with the shipment of waste; and
- D) Waste analysis data, where available.
- 2) If a generator determines that the generator is managing a restricted waste under this Part, and determines that the waste can be land disposed without further treatment, with each shipment of waste the generator shall submit, to the treatment, storage or land disposal facility, a notice and a certification stating that the waste meets the applicable treatment standards set forth in Subpart D and the applicable prohibition levels set forth in Section 728.132 or 728.139.
 - A) The notice must include the following information:
 - i) USEPA Hazardous Waste Number;
 - ii) The corresponding treatment standard;
 - iii) The manifest number associated with the shipment of waste;
 - iv) Waste analysis data, where available.
 - B) The certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 35 Ill. Adm. Code 728.Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132, 728.139 or Section 3004(d) of the Resource Conservation and Recovery Act. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

3) If a generator's waste is subject to <u>an exemption from a</u> prohibition on the type of land disposal method utilized for the

waste (such as, but not limited to, a case-by-case extension under Section 728.105, an exemption under Section 728.106, an extension under Section 728.101(c)(3) or a nationwide capacity variance under 40 CFR 268.Subpart C -(1987)-(1989), with each snipment of waste, the generator shall submit a notice with the waste to the facility receiving the generator's waste, stating that the waste is not prohibited from land disposal. The notice must include the following information:

- A) EPA hazardous waste number:
- B) The corresponding treatment standards and all applicable prohibitions set forth in Section 728.132 or 728.139;
- C) The manifest number associated with the shipment of waste;
- D) Waste analysis data, where available, and
- E) The date the waste is subject to the prohibitions.
- 4) If a generator determines that the generator is managing a waste that is subject to the prohibitions under Section 728.133(f) (including wastes that are disposed of in disposal units other than landfills or surface impoundments) and is not subject to the prohibitions set forth in Section 728.132, with each shipment of waste, the generator shall notify the treatment storage or disposal facility, in writing, of any applicable prohibitions set forth in Section 728.133(f). The notice must include the following information:
 - A) USEPA hazandous waste numben;
 - B) The applicable prohibitions set forth in Section 728.133(f);
 - C) The manifest number associated with the shipment of waste; and
 - D) Waste analysis data where available.
- 5) If a generator determines whether the waste is restricted based solely on the generator's knowledge of the waste, the generator shall retain all supporting data used to make this determination on-site in the generator's files. If a generator determines whether the waste is restricted based on testing the waste or an extract developed using the test method described in Appendix A, the generator shall retain all waste analysis data on site in the generator's files.
- 6) Generators shall retain on-site a copy of all notices, certifications, demonstrations, waste analysis data and other documentation produced pursuant to this Section for at least five years from the date that the waste that is the subject of such documentation was last sent to on-site or off-site

treatment storage or disposal. The five year record retention period is automatically extended during the course of any unresolved enforcement action regarding the regulated activity or as requested by the Agency.

- b) Treatment facilities shall test their wastes according to the frequency specified in their waste analysis plans as required by 35 Ill. Adm. Code 724.113 or 725.113. Such testing must be performed as provided in subsections (b)(1), (b)(2) and (b)(3).
 - 1) For wastes with treatment standards expressed as concentrations in the waste extract (Section 728.141), the owner or operator of the treatment facility shall test the treatment residues or an extract of such residues developed using the test method described in Appendix A to assure that the treatment residues or extract meet the applicable treatment standards.
 - 2) For wastes prohibited under Section 728.132 or 728.139 which are not subject to any treatment standards under Subpart D, the owner or operator of the treatment facility shall test the treatment residues according to the generator testing requirements specified in Section 728.132 to assure that the treatment residues comply with the applicable prohibitions.
 - 3) For wastes with treatment standards expressed as concentrations in the waste (Section 728.143), the owner or operator of the treatment facility shall test the treatment residues (not an extract of such residues) to assure that the treatment residues meet the applicable treatment standards.
 - A notice must be sent to the land disposal facility which includes the following information:
 - A) USEPA Hazardous Waste Number;
 - B) The corresponding treatment standards and all applicable prohibitions set forth in Section 728.132 or 728.139.
 - C) The manifest number associated with the shipment of waste; and
 - D) Waste analysis data, where available.
 - 5) The treatment facility shall submit a certification with each shipment of waste or treatment residue of a restricted waste to the land disposal facility stating that the waste or treatment residue has been treated in compliance with the treatment standards specified in Subpart D and the applicable prohibitions set forth in Section 728.132 or 728.139.
 - A) For wastes with treatment standards expressed as concentrations in the waste extract or in the waste (Section: 728.141 or 728.143), or for wastes prohibited under Section 728.132 or 728.139 which are not subject to

any treatment standards under Subpart D, the certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 35 111. Adm. Code 728. Subpart D and all applicable prohibitions set forth in 35 Ill. Adm. Code 728.132 or 728.139 or section 3004(d) of the Resource Conservation and Recovery Act without dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

B) For wastes with treatment standards expressed as technologies (Section 728.142), the certification must be signed by an authorized representative and must state the following:

I certify under penalty of law that the waste has been treated in accordance with the requirements of 35 Ill. Adm. Code 728.142. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

- 6) If the waste or treatment residue will be further managed at a different treatment or storage facility, the treatment, storage or disposal facility sending the waste or treatment residue offsite must comply with the notice and certification requirements applicable to generators under this Section.
- 7) For wastes that are subject to the prohibitions under Section 728.133(f) and are not subject to the prohibitions set forth in Section 728.132, with each shipment of such waste the owner or operator shall notify any subsequent treatment, storage or disposal facility in writing, of any applicable prohibitions in writing, of any applicable prohibitions set forth in Section 728.133(f). The notice must include the following information:
 - A) USEPA nazardous waste number;
 - B) The applicable prohibitions set forth in Section 728.133(f);
 - C) The manifest number associated with the shipment of waste; and

- D) Waste analysis data, where available.
- Where the wastes are recyclable materials used in a manner constituting disposal subject to the provisions of 35 Ill. Adm. Code 726.120(b), regarding treatment standards and prohibition levels, the owner or operator of a treatment facility (i.e. the recycler) is not required to notify the receiving facility pursuant to subsection (b)(4). With each shipment of such wastes the owner or operator of the recycling facility shall submit a certification described in subsection (b)(5), and a notice which includes the information listed in subsection (b)(4) (except the manifest number) to the Agency. The recycling facility also shall keep records of the name and location of each entity receiving the hazardous waste-derived product.
- c) The owner or operator of any land disposal facility disposing any waste subject to restrictions under this Part shall:
 - 1) Have copies of the notice and certification specified in subsection (a) or (b), and the certification specified in Section 728.108 if applicable.
 - Test the waste, or an extract of the waste or treatment residue developed using the test method described in Appendix A or using any methods required by generators under Section 728.132, to assure that the wastes or treatment residues are in compliance with the applicable treatment standards set forth in Subpart D and all applicable prohibitions set forth in Sections 728.132 or 728.139. Such testing must be performed according to the frequency specified in the facility's waste analysis plan as required by 35 Ill. Adm. Code 724.113 or 725.113.
 - Where the owner or operator is disposing of any waste that is subject to the prohibitions under Section 728.133(f) but not subject to the prohibitions set forth in Section 728.132, the owner or operator shall ensure that such waste is the subject of a certification according to the requirements of Section 728.108 prior to disposal in a landfill or surface impoundment unit, and that such disposal is in accordance with the requirements of Section 728.105(h)(2). The same requirement applies to any waste that is subject to the prohibitions under Section 728.133(f) and also is subject to the statutory prohibitions in the codified prohibitions in Section 728.139 or Section 728.132
 - Where the owner or operator is disposing of any waste that is a recyclable material used in a manner constituting disposal subject to the provisions of 35 III. Adm. Code 726.120(b), the owner or operator is not subject to subsections (c)(1) through (3) with respect to such waste.

(Source: Amended at 14 III. Reg. , effective)

Section 728.108 Landfill and Surface Impoundment Disposal Restrictions

The Board incorporates by reference 40 CFR 268.8-, as adepted at 53 Fed. Reg. 31211, August 17, 1988- (1989), as amended at 54 Fed. Reg. 36970, September 6, 1989. This Section incorporates no future editions or amendments. Prior to May 8, 1990, wastes which are otherwise prohibited from land disposal under Section 728.133(f) may be disposed in a landfill or surface impoundment which is in compliance with the requirements of 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105, provided the requirements of 40 CFR 268.8 are met.

(Source: Amended at 14 111. Reg. , effective)

SUBPART C: PROHIBITION ON LAND DISPOSAL

Section 728.132 Waste Specific Prohibitions -- California List Wastes

- a) The following hazardous wastes are prohibited from land disposal (except in injection wells):
 - 1) Liquid hazardous wastes having a pH less than or equal to two (2.0);
 - 2) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm;
 - 3) Liquid hazardous wastes that are primarily water and contain halogenated organic compounds (HOCs) in total concentration greater than or equal to 1000 mg/l and less than 10,000 mg/l HOCs.
- d) The requirements of subsection (a) and (e) do not apply until:
 - 1) November 8, 1989, where the wastes are contaminated soil or debris not resulting from a CERCLA response action or from RCRA corrective action, as defined in Section 728.102. Until July 8, 1989, the wastes may be disposed of in a landfill or surface impoundment only if such disposal is in compliance with the requirements in 40 CFR 268.5(n)(2), incorporated by reference in Section 728.105.
 - 2) November 8, 1990, where the wastes are contaminated soil or debris resulting from a CERCLA response action or RCRA corrective action. Until November 8, 1990, the wastes may be disposed in a langfill or surface impoundment only if such unit is in compliance with the requirements specified in 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105.
- e) The following hazardous wastes are prohibited from land disposal (subject to any regulation that may be promulgated with respect to disposal in injection wells):
 - 1) Liquid hazardous wastes that contain HOCs in total concentration greater than or equal to 1000 mg/l and are not prohibited under

- subsection (a)(3); and
- 2) Nonliquid hazardous wastes containing HOCs in total concentration greater than or equal to 1000 mg/kg and which are not wastes described in subsection (d).
- f) The wastes described in subsections (e)(1) and (e)(2) may be disposed of in a landfill or surface impoundment only if the -feeility-such unit is in compliance with the requirements specified in 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105.
- g) The requirements of subsections (a), (d) and (e) do not apply if:
 - 1) Persons have been granted an adjusted standard from a prohibition pursuant to a petition under Section 728.106, with respect to those wastes and units covered by the petition (except for liquid hazardous wastes containing PCBs at concentrations greater than or equal to 500 ppm which are not eligible for exemptions); or,
 - 2) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension; or
 - 3) The wastes meet the applicable standards specified in Subpart D or, where treatment standards are not specified, the wastes are in compliance with the applicable prohibitions set forth in this Section or Section 728.139.
- h) The prohibitions and effective dates specified in subsections (a)(3), (d) and (e) do not apply where the waste is subject to a Subpart C prohibition and effective date for a specified HOC (such as a hazardous waste chlorinated solvent, see e.g. Section 728.130(a)).
- i) To determine whether or not a waste is a liquid under subsections (a) or (e) or under Section 728.139, the following test must be used:
 Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes", incorporated by reference in 35 Ill. Adm. Code 720.111.
- j) Except as otherwise provided in this subsection, the waste analysis and recordkeeping requirements of Section 728.107 are applicable to wastes prohibited under this Part or Section 728.139:
 - The initial generator of a liquid hazardous waste shall test the waste (not an extract or filtrate) in accordance with the procedures specified in 35 Ill. Adm. Code 721.122(a)(1), or use knowledge of the waste, to determine if the waste has a pH less than or equal to two (2.0). If the liquid waste has a pH less than or equal to two (2.0), it is restricted from land disposal and all requirements of this Part are applicable, except as otherwise specified in this Section.
 - 2) The initial generator of either a liquid hazardous waste

containing PCBs or a liquid or nonliquid hazardous waste containing HOCs shall test the waste (not an extract or filtrate), or use knowledge of the waste, to determine whether the concentration levels in the waste equal or exceed the prohibition levels specified in this Section. If the concentration of PCBs or HOCs in the waste is greater than or equal to the prohibition levels specified in this Section, the waste is restricted from land disposal and all requirements of this Part are applicable, except as otherwise specified in this Section.

(Source: Amended at 14 III. Reg. , effective Section 728.133 Waste Specific Prohibitions -- First Third Wastes

a) The wastes specified in 35 lll. Adm. Code 721.132 as USEPA hazardous wastes numbers listed below are prohibited from land disposal (except in an injection well). Until August 7, 1990, K061 wastes containing 15% zinc or greater are prohibited from land disposal pursuant to the treatment standards specified in Section 728.141 applicable to K061 wastes that contain less than 15% zinc.

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F006 (nonwastewater)
K001
K004 - (nenwastewater) - wastes specified in Section 728.143(a) and
K008 - (nenwastewater)-wastes specified in Section 728.143(a) and
     Table B
K015
K016
K018
K019
K020
KO21 -{nenwastewater}-wastes specified in Section 728.143(a) and
     Table B
KO22 (nonwastewater)
K024
KO25 nonwastewaters specified in Section 728.143(a) and Table 3
K030
KO36 (nonwastewater)
K037
K044
KO45 (nonexplosive)
KO46 (nonwastewater)
K047
K060 (nonwastewater)
KO61 (nonwastewaters containing less than 15% zinc)
KO62 (non CaSO<sub>A</sub>)
KO69 (nonwastewater)
K083 (nonwastewater)-
KO86 (solvent washes),
K087
K099
K100 nonwastewaters specified in Section 728.143(a) and Table B
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K101 (wastewater)
K101 (nonwastewater, low arsenic subcategory -- less than 1% total arsenic
K102
K103
K104

- b) Effective August 8, 1990, the wastes specified in 35 III. Adm. Code 721.132 as USEPA Hazandous Waste Nos. K048, K049, K050, K051, K052, K061 (containing 15% zinc or greater), and K071 are prohibited from land disposal.
- c) Effective August 8, 1990, the wastes specified in Section 728.110 having a treatment standard in Subpart D based on incineration and which are contaminated soil and debris are prohibited from land disposal.
- d) Until August 8, 1990, wastes included in subsection (b) and (c) may be disposed of in a landfill or surface impoundment only if such unit is in compliance with the requirements specified in 40 CFR 268.5(h)(2), incorporated by reference in Section 728.105.
- e) The requirements of subsection (a), (b), (c) and (d) do not apply if:
 - 1) The wastes meet the applicable standards specified in Subpart D; or
 - 2) Persons have been granted an adjusted standard pursuant to Section 728.106, with respect to those wastes and units covered by the petition; or
 - 3) Persons have been granted an extension to the effective date of a prohibition pursuant to Section 728.105, with respect to those wastes covered by the extension.
- f) Until May 8, 1990, the wastes specified in Section 728.110 for which treatment standards under Subpart D -are not applicable-have not been promulgated, including those wastes which are subject to the statutory prohibitions of Section 728.139 or codified prohibitions under Section 728.132, but not including wastes subject to a treatment standard under Section 728.142, are prohibited from disposal in a landfill or surface impoundment unless -the wastes are the subject of a valid demonstration and certification have been submitted pursuant to Section 728.108.
- g) To determine whether a hazardous waste listed in Section 728.110 exceeds the applicable treatment standards specified in Sections 728.131 and 728.143, the initial generator shall test a representative sample of the -waste extract of the waste, or the generator may use knowledge of the waste, or the generator shall test the entire waste depending on whether the treatment standards are expressed as concentrations in the waste extract or the waste. If the waste contains constituents in excess of the

applicable Subpart D levels, the waste is prohibited from land disposal and all requirements of this Part are applicable except as otherwise specified.

(Source: Amended at 14 Ill. Reg. , effective)

SUBPART E: PROHIBITIONS ON STORAGE

Section 728.150 Prohibitions on Storage of Restricted Wastes

- a) Except as provided in this Section, the storage of hazardous wastes restricted from land disposal under Subpart C is prohibited, unless the following conditions are met:
 - A generator stores such wastes in tanks or containers on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and the generator complies with the requirements in 35 Ill. Adm. Code 722.134. (A generator who is in existence on the effective date of a regulation under this Part and who must store hazardous wastes for longer than 90 days due to the regulations under this Part becomes an owner or operator of a storage facility and must obtain a RCRA permit, as required by 35 Ill. Adm. Code 703. Such a facility may qualify for interim status upon compliance with the regulations governing interim status under 35 Ill. Adm. Code 703.153).
 - 2) An owner or operator of a hazardous waste treatment, storage or disposal facility stores such wastes in tanks or containers solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal and
 - A) Each container is clearly marked to identify its contents and the date each period of accumulation begins;
 - B) Each tank is clearly marked with a description of its contents, the quantity of each hazardous waste received and the date each period of accumulation begins, or such information is recorded and maintained in the operating record at the facility. Regardless of whether the tank itself is marked, the owner and operator shall comply with the operating record requirements of 35 Ill. Adm. Code 724.173 or 725.173.
 - 3) A transporter stores manifested shipments of such wastes at a transfer facility for 10 days or less.
- An owner or operator of a treatment, storage or disposal facility may store such wastes for up to one year unless the Agency can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

- c) An owner or operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner or operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.
- d) The prohibition in subsection (a) does not apply to the wastes which are the subject of an approved petition under Section 728.106; a nationwide variance contained in Subpart 6; an approved case-by-case extension under Section 728.195 or a valid certification under Section 728.108.—If a generator's waste is exempt from a prohibition on the type of land disposal utilized for the waste (for example, because of an approved case-by-case extension under 40 CFR 268.5, incorporated by reference in Section 728.105, an approved Section 728.106 petition or a national capacity variance under 40 CFR 268, Subpart C, the prohibition in subsection (a) does not apply during the period of such exemption.
- e) The prohibition in subsection (a) does not apply to hazardous wastes that meet the treatment standards specified under Sections 728.141, 728.142 and 728.143 or the adjusted treatment standards specified under Section 728.144, or, where treatment standards have not been specified, is in compliance with the applicable prohibitions specified in Section 728.132 or 728.139.
- f) Liquid hazardous wastes containing PCBs at concentrations greater than or equal to 50 ppm must be stored at a facility that meets the requirements of 40 CFR 761.65(b), incorporated by reference in 35 Ill. Adm. Code 720.111, and must be removed from storage and treated or disposed as required by the Part within one year of the date when such wastes are first placed into storage. The provisions of subsection (c) do not apply to such PCB wastes prohibited under Section 728.132.

(Source: Amended at 14 Ill. Reg. , effective)