

ILLINOIS POLLUTION CONTROL BOARD
March 28, 1991

IN THE MATTER OF:)
)
RCRA UPDATE, USEPA REGULATIONS) (Identical in Substance Rules)
(7-1-90 through 12-31-90)) R91-1

PROPOSAL FOR PUBLIC COMMENT

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

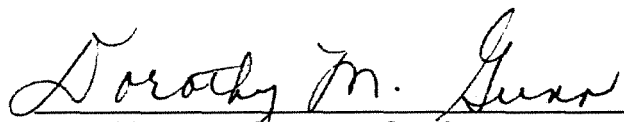
Pursuant to Sections 22.4(a) of the Environmental Protection Act (Act), the Board proposes amendments to the Resource Conservation and Recovery Act (RCRA) regulations.

Section 22.4(a) provides for quick adoption of regulations which are "identical in substance" to federal regulations and that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) shall not apply. Because this rulemaking is not subject to Section 5 of the APA, 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 268. This rulemaking updates RCRA rules to correspond with federal amendments more fully outlined in the accompanying Opinion.

This Order is supported by an Opinion adopted on the same day. The Board will receive public comment on the proposal for a period of 45 days following its publication in the Illinois Register. The complete text of the proposed rules follows.

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 28th day of March, 1991, by a vote of 7-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

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

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 RCRA PERMIT PROGRAM

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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. 1989, ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R82-19, 53 PCB 131, at 7 Ill. Reg. 14289,

effective October 12, 1983; amended in R83-24 at 8 Ill. Reg. 206, effective December 27, 1983; amended in R84-9 at 9 Ill. Reg. 11899, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1110, effective January 2, 1987; amended in R85-23 at 10 Ill. Reg. 13284, effective July 28, 1986; amended in R86-1 at 10 Ill. Reg. 14093, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20702, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6121, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13543, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19383, effective November 12, 1987; amended in R87-26 at 12 Ill. Reg. 2584, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13069, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 447, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18477, effective November 13, 1989; amended in R89-9 at 14 Ill. Reg. 6278, effective April 16, 1990; amended in R90-2 at 14 Ill. Reg. 14492, effective August 22, 1990; amended in R90-11 at 15 Ill. Reg. , effective

SUBPART D: APPLICATIONS

Section 703.208 Drip Pads

Except as otherwise provided by 35 Ill. Adm. Code 724.101, owners and operators of hazardous waste treatment, storage or disposal facilities that collect, store or treat hazardous waste on drip pads shall provide the following additional information:

- a) A list of hazardous wastes placed or to be placed on each drip pad.
- b) If an exemption is sought to 35 Ill. Adm. Code 724.Subpart F, as provided by 35 Ill. Adm. Code 724.190, detailed plans and an engineering report describing how the requirements of 35 Ill. Adm. Code 724.190(b)(2) will be met.
- c) Detailed plans and an engineering report describing how the drip pad is or will be designed, constructed, operated and maintained to meet the requirements of 35 Ill. Adm. Code 724.672, including the as-built drawings and specifications. This submission must address the following items as specified in 35 Ill. Adm. Code 724.671 :
 - 1) The design characteristics of the drip pad;
 - 2) The liner system;
 - 3) The leakage detection system, including the leak detection system and how it is designed to detect the failure of the drip pad or the presence of any

releases of hazardous waste or accumulated liquid at the earliest practicable time;

- 4) Practices designed to maintain drip pads;
- 5) The associated collection system;
- 6) Control of run-on to the drip pad;
- 7) Control of run-off from the drip pad;
- 8) The interval at which drippage and other materials will be removed from the associated collection system and a statement demonstrating that the interval will be sufficient to prevent overflow onto the drip pad;
- 9) Cleaning procedures and documentation.
 - A) Procedures for cleaning the drip pad at least once every seven days to ensure the removal of any accumulated residues of waste or other materials, including, but not limited to: rinsing; washing with detergents or other appropriate solvents; or, steam cleaning. And,
 - B) Provisions for documenting the date, time and cleaning procedure used each time the pad is cleaned.
- 10) Operating practices and procedures that will be followed to ensure that tracking of hazardous waste or waste constituents off the drip pad due to activities by personnel or equipment is minimized;
- 11) Procedures for ensuring that, after removal from the treatment vessel, treated wood from pressure and non-pressure processes is held on the drip pad until drippage has ceased, including recordkeeping practices;
- 12) Provisions for ensuring that collection and holding units associated with the run-on and run-off control systems are emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system;
- 13) If treatment is carried out on the drip pad, details of the process equipment used, and the nature and quality of the residuals.

- 14) A description of how each drip pad, including appurtenances for control of run-on and run-off, will be inspected in order to meet the requirements of 35 Ill. Adm. Code 724.672. This information must be included in the inspection plan submitted under Section 703.183(e).
- 15) A certification signed by an independent qualified, registered professional engineer, stating that the drip pad design meets the requirements of 35 Ill. Adm. Code 724.671(a) - (f).
- 16) A description of how hazardous waste residues and contaminated materials will be removed from the drip pad at closure, as required under 35 Ill. Adm. Code 724.673(a). For any waste not to be removed from the drip pad upon closure, the owner or operator shall submit detailed plans and an engineering report describing how 35 Ill. Adm. Code 724.410(a) and (b) will be complied with. This information must be included in the closure plan and, where applicable, the post-closure plan submitted under Section 703.183(m).

BOARD NOTE: Derived from 40 CFR 270.22, adopted at 55 Fed. Reg. 50489, December 6, 1990.

(Source: Added at 15 Ill. Reg. , effective
)

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

PART 720
 HAZARDOUS WASTE MANAGEMENT SYSTEM: GENERAL

SUBPART A: GENERAL PROVISIONS

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Appendix A Overview of 40 CFR, Subtitle C Regulations

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-19 at 7 Ill. Reg. 14015, effective Oct. 12, 1983; amended in R84-9, 53 PCB 131 at 9 Ill. Reg. 11819, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 968, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 13998, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20630, effective December 2, 1986; amended in R86-28 at 11 Ill. Reg. 6017, effective March 24, 1987; amended in R86-46 at 11 Ill. Reg. 13435, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19280, effective November 12, 1987;

amended in R87-26 at 12 Ill. Reg. 2450, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 12999, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 362, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18278, effective November 13, 1989; amended in R89-2 at 14 Ill. Reg. 3075, effective February 20, 1990; amended in R89-9 at 14 Ill. Reg. 6225, effective April 16, 1990; amended in R90-10 at 14 Ill. Reg. , effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. , effective ; amended in R90-11 at 15 Ill. Reg. , effective ; amended in R91-1 at 15 Ill. Reg. , effective

SUBPART B: DEFINITIONS

Section 720.110 Definitions

When used in 35 Ill. Adm. Code 720 through 725 and 728 only, the following terms have the meanings given below:

"Aboveground tank" means a device meeting the definition of "tank" that is situated in such a way that the entire surface area of the tank is completely above the plane of the adjacent surrounding surface and the entire surface area of the tank (including the tank bottom) is able to be visually inspected.

"Act" or "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.)

"Active life" of a facility means the period from the initial receipt of hazardous waste at the facility until the Agency receives certification of final closure.

"Active portion" means that portion of a facility where treatment, storage or disposal operations are being or have been conducted after May 19, 1980, and which is not a closed portion. (See also "closed portion" and "inactive portion".)

"Administrator" means the Administrator of the U.S. Environmental Protection Agency or the Administrator's designee.

"Agency" means the Illinois Environmental Protection Agency.

"Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves and pumps, that is used to distribute, meter or control the flow of hazardous waste from its

point of generation to storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site.

"Aquifer" means a geologic formation, group of formations or part of a formation capable of yielding a significant amount of groundwater to wells or springs.

"Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent or person of equivalent responsibility.

"Board" means the Illinois Pollution Control Board.

"Boiler" means an enclosed device using controlled flame combustion and having the following characteristics:

The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids or heated gases; and the unit's combustion chamber and primary energy recovery section(s) must be of integral design. To be of integral design, the combustion chamber and the primary energy recovery section(s) (such as waterwalls and superheaters) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section. The following units are not precluded from being boilers solely because they are not of integral design: process heaters (units that transfer energy directly to a process stream), and fluidized bed combustion units; and

While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

The unit must export and utilize at least 75 percent of the recovered energy, calculated on an

annual basis. In this calculation, no credit shall be given for recovered heat used internally in the same unit. (Examples of internal use are the preheating of fuel or combustion air, and the driving of induced or forced draft fans or feedwater pumps); or

The unit is one which the Board has determined, on a case-by-case basis, to be a boiler, after considering the standards in Section 720.132.

"Certification" means a statement of professional opinion based upon knowledge and belief.

"Closed Portion" means that portion of a facility which an owner or operator has closed in accordance with the approved facility closure plan and all applicable closure requirements. (See also "active portion" and "inactive portion".)

"Component" means either the tank or ancillary equipment of a tank system.

"Confined aquifer" means an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself; an aquifer containing confined groundwater.

"Container" means any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled.

"Contingency plan" means a document setting out an organized, planned and coordinated course of action to be followed in case of a fire, explosion or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

"Corrosion expert" means a person who, by reason of knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control on buried or submerged metal piping systems and metal tanks.

"Designated facility".

"Designated facility" means a hazardous waste treatment, storage or disposal facility,

Which:

Has received a RCRA permit (or interim status) pursuant to 35 Ill. Adm. Code 702, 703 and 705;

Has received a RCRA permit from USEPA pursuant to 40 CFR 124 and 270 (1989);

Has received a RCRA permit from a state authorized by USEPA pursuant to 40 CFR 271 (1989); or

Is regulated under 35 Ill. Adm. Code 721.106(c)(2) or 266.Subpart F; and

Which has been designated on the manifest by the generator pursuant to 35 Ill. Adm. Code 722.120.

If a waste is destined to a facility in a state, other than Illinois, which has been authorized by USEPA pursuant to 40 CFR 271, but which has not yet obtained authorization to regulate that waste as hazardous, then the designated facility must be a facility allowed by the receiving state to accept such waste.

"Dike" means an embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids or other materials.

"Director" means the Director of the Illinois Environmental Protection Agency.

"Discharge" or "hazardous waste discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying or dumping of hazardous waste into or on any land or water.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters.

"Disposal facility" means a facility or part of a facility at which hazardous waste is intentionally placed into or on any land or water and at which waste will remain after closure.

"Drip pad" means an engineered structure consisting of a curbed, free-draining base, constructed of non-earthen materials and designed to convey preservative kick-back or drippage from treated wood, precipitation and surface water run-on to an associated collection system at wood preserving plants.

"Elementary neutralization unit" means a device which:

Is used for neutralizing wastes which are hazardous only because they exhibit the corrosivity characteristic defined in 35 Ill. Adm. Code 721.122 or are listed in 35 Ill. Adm. Code 721.Subpart D only for this reason; and

Meets the definition of tank, tank system, container, transport vehicle or vessel in this Section.

"EPA" or "USEPA " means United States Environmental Protection Agency.

"EPA hazardous waste number" or "USEPA hazardous waste number" means the number assigned by EPA to each hazardous waste listed in 35 Ill. Adm. Code 721.Subpart D and to each characteristic identified in 35 Ill. Adm. Code 721.Subpart C.

"EPA identification number" or "USEPA identification number" means the number assigned by USEPA pursuant to 35 Ill. Adm. Code 722 through 725 to each generator, transporter and treatment, storage or disposal facility.

"EPA region" means the states and territories found in any one of the following ten regions:

Region I: Maine, Vermont, New Hampshire, Massachusetts, Connecticut and Rhode Island.

Region II: New York, New Jersey, Commonwealth of Puerto Rico and the U.S. Virgin Islands

Region III: Pennsylvania, Delaware, Maryland, West Virginia, Virginia and the District of Columbia

Region IV: Kentucky, Tennessee, North Carolina, Mississippi, Alabama, Georgia, South Carolina and Florida

Region V: Minnesota, Wisconsin, Illinois, Michigan, Indiana and Ohio

Region VI: New Mexico, Oklahoma, Arkansas, Louisiana and Texas

Region VII: Nebraska, Kansas, Missouri and Iowa

Region VIII: Montana, Wyoming, North Dakota, South Dakota, Utah and Colorado

Region IX: California, Nevada, Arizona, Hawaii, Guam, American Samoa and Commonwealth of the Northern Mariana Islands

Region X: Washington, Oregon, Idaho and Alaska

"Equivalent method" means any testing or analytical method approved by the Board pursuant to Section 720.120.

"Existing hazardous waste management (HWM) facility" or "existing facility" means a facility which was in operation or for which construction commenced on or before November 19, 1980. A facility had commenced construction if the owner or operator had obtained the federal, state and local approvals or permits necessary to begin physical construction and either

A continuous on-site, physical construction program had begun or the owner or operator had entered into contractual obligations -- which could not be cancelled or modified without substantial loss -- for physical construction of the facility to be completed within a reasonable time. "Existing portion" means that land surface area of an existing waste management unit, included in the original Part A permit application, on which wastes have been placed prior to the issuance of a permit.

"Existing tank system" or "existing component" means a tank system or component that is used for the storage or treatment of hazardous waste and that is in operation, or for which installation has commenced on or prior to July 14, 1986. Installation will be considered to have commenced if the owner or operator

has obtained all federal, State and local approvals or permits necessary to begin physical construction of the site or installation of the tank system and if either

A continuous on-site physical construction or installation program has begun; or

The owner or operator has entered into contractual obligations -- which cannot be canceled or modified without substantial loss -- for physical construction of the site or installation of the tank system to be completed within a reasonable time.

"Facility" means all contiguous land and structures, other appurtenances and improvements on the land used for treating, storing or disposing of hazardous waste. A facility may consist of several treatment, storage or disposal operational units (e.g., one or more landfills, surface impoundments or combinations of them).

"Final closure" means the closure of all hazardous waste management units at the facility in accordance with all applicable closure requirements so that hazardous waste management activities under 35 Ill. Adm. Code 724 and 725 are no longer conducted at the facility unless subject to the provisions of 35 Ill. Adm. Code 722.134.

"Federal agency" means any department, agency or other instrumentality of the federal government, any independent agency or establishment of the federal government including any government corporation and the Government Printing Office.

"Federal, state and local approvals or permits necessary to begin physical construction" means permits and approvals required under federal, state or local hazardous waste control statutes, regulations or ordinances.

"Food-chain crops" means tobacco, crops grown for human consumption and crops grown for feed for animals whose products are consumed by humans.

"Freeboard" means the vertical distance between the top of a tank or surface impoundment dike and the surface of the waste contained therein.

"Free liquids" means liquids which readily separate from the solid portion of a waste under ambient

temperature and pressure.

"Generator" means any person, by site, whose act or process produce hazardous waste identified or listed in 35 Ill. Adm. Code 721 or whose act first causes a hazardous waste to become subject to regulation.

"Groundwater" means water below the land surface in a zone of saturation.

"Hazardous waste" means a hazardous waste as defined in 35 Ill. Adm. Code 721.103.

"Hazardous waste constituent" means a constituent which caused the hazardous waste to be listed in 35 Ill. Adm. Code 721.Subpart D, or a constituent listed in of 35 Ill. Adm. Code 721.124.

"Hazardous waste management unit" is a contiguous area of land on or in which hazardous waste is placed, or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area. Examples of hazardous waste management units include a surface impoundment, a waste pile, a land treatment area, a landfill cell, an incinerator, a tank and its associated piping and underlying containment system and a container storage area. A container alone does not constitute a unit; the unit includes containers and the land or pad upon which they are placed.

"Inactive portion" means that portion of a facility which is not operated after November 19, 1980. (See also "active portion" and "closed portion".)

"Incinerator" means any enclosed device using controlled flame combustion which is neither a "boiler" nor an "industrial furnace".

"Incompatible waste" means a hazardous waste which is suitable for:

Placement in a particular device or facility because it may cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or

Commingling with another waste or material under uncontrolled conditions because the commingling might produce heat or pressure, fire or explosion, violent reaction, toxic dusts, mists, fumes or gases or flammable fumes or gases.

(See 35 Ill. Adm. Code 725. Appendix E for examples.)

"Industrial furnace" means any of the following enclosed devices that are integral components of manufacturing processes and that use controlled flame devices to accomplish recovery of materials or energy:

Cement kilns

Lime kilns

Aggregate kilns

Phosphate kilns

Coke ovens

Blast furnaces

Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters and foundry furnaces)

Titanium dioxide chloride process oxidation reactors

Methane reforming furnaces

Pulping liquor recovery furnaces

Combustion devices used in the recovery of sulfur values from spent sulfuric acid

Any other such device as the Agency determines to be an "Industrial Furnace" on the basis of one or more of the following factors:

The design and use of the device primarily to accomplish recovery of material products;

The use of the device to burn or reduce raw materials to make a material product;

The use of the device to burn or reduce secondary materials as effective substitutes for raw materials, in processes using raw materials as principal feedstocks;

The use of the device to burn or reduce

secondary materials as ingredients in an industrial process to make a material product;

The use of the device in common industrial practice to produce a material product; and

Other relevant factors.

"Individual generation site" means the contiguous site at or on which one or more hazardous wastes are generated. An individual generation site, such as a large manufacturing plant, may have one or more sources of hazardous waste but is considered a single or individual generation site if the site or property is contiguous.

"Inground tank" means a device meeting the definition of "tank" whereby a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface area of the tank that is in the ground.

"In operation" refers to a facility which is treating, storing or disposing of hazardous waste.

"Injection well" means a well into which fluids are being injected. (See also "underground injection".)

"Inner liner" means a continuous layer of material placed inside a tank or container which protects the construction materials of the tank or container from the contained waste or reagents used to treat the waste.

"Installation inspector" means a person who, by reason of knowledge of the physical sciences and the principles of engineering, acquired by a professional education and related practical experience, is qualified to supervise the installation of tank systems.

"International shipment" means the transportation of hazardous waste into or out of the jurisdiction of the United States.

"Land treatment facility" means a facility or part of a facility at which hazardous waste is applied onto or incorporated into the soil surface; such facilities are disposal facilities if the waste will remain after closure.

"Landfill" means a disposal facility or part of a facility where hazardous waste is placed in or on land and which is not a pile, a land treatment facility, a surface impoundment, an underground injection well, a salt dome formation, an underground mine or a cave.

"Landfill cell" means a discrete volume of a hazardous waste landfill which uses a liner to provide isolation of wastes from adjacent cells or wastes. Examples of landfill cells are trenches and pits.

"Leachate" means any liquid, including any suspended components in the liquid, that has percolated through or drained from hazardous waste.

"Liner" means a continuous layer of natural or manmade materials beneath or on the sides of a surface impoundment, landfill or landfill cell, which restricts the downward or lateral escape of hazardous waste, hazardous waste constituents or leachate.

"Leak-detection system" means a system capable of detecting the failure of either the primary or secondary containment structure or the presence of a release of hazardous waste or accumulated liquid in the secondary containment structure. Such a system must employ operational controls (e.g., daily visual inspections for releases into the secondary containment system of aboveground tanks) or consist of an interstitial monitoring device designed to detect continuously and automatically the failure of the primary or secondary containment structure or the presence of a release of hazardous waste into the secondary containment structure.

"Management" or "hazardous waste management" means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery and disposal of hazardous waste.

"Manifest" means the shipping document originated and signed by the generator which contains the information required by 35 Ill. Adm. Code 722.Subpart B.

"Manifest document number" means the USEPA twelve digit identification number assigned to the generator plus a unique five digit document number assigned to the manifest by the generator for recording and reporting purposes.

"Mining overburden returned to the mine site" means any material overlying an economic mineral deposit which is

removed to gain access to that deposit and is then used for reclamation of a surface mine.

"Miscellaneous unit" means a hazardous waste management unit where hazardous waste is treated, stored or disposed of and which is not a container, tank, tank system, surface impoundment, pile, land treatment unit, landfill, incinerator, boiler, industrial furnace, underground injection well with appropriate technical standards under 35 Ill. Adm. Code 730, or a unit eligible for a research, development and demonstration permit under 35 Ill. Adm. Code 703.231.

"Movement" means that hazardous waste transported to a facility in an individual vehicle.

"New hazardous waste management facility" or "new facility" means a facility which began operation, or for which construction commenced, after November 19, 1980. (See also "Existing hazardous waste management facility".)

"New tank system" or "new tank component" means a tank system or component that will be used for the storage or treatment of hazardous waste and for which installation commenced after July 14, 1986; except, however, for purposes of 35 Ill. Adm. Code 724.293(g)(2) and 725.293(g)(2), a new tank system is one for which construction commences after July 14, 1986. (See also "existing tank system".)

"Onground tank" means a device meeting the definition of "tank" that is situated in such a way that the bottom of the tank is on the same level as the adjacent surrounding surfaces so that the external tank bottom cannot be visually inspected.

"On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties is at a crossroads intersection and access is by crossing as opposed to going along the right-of-way. Noncontiguous properties owned by the same person but connected by a right-of-way which he controls and to which the public does not have access is also considered on-site property.

"Open burning" means the combustion of any material without the following characteristics:

Control of combustion air to maintain adequate temperature for efficient combustion;

Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and

Control of emission of the gaseous combustion products.

(See also "incineration" and "thermal treatment".)

"Operator" means the person responsible for the overall operation of a facility.

"Owner" means the person who owns a facility or part of a facility.

"Partial closure" means the closure of a hazardous waste management unit in accordance with the applicable closure requirements of 35 Ill. Adm. Code 724 or 725 at a facility which contains other active hazardous waste management units. For example, partial closure may include the closure of a tank (including its associated piping and underlying containment systems), landfill cell, surface impoundment, waste pile or other hazardous waste management unit, while other units of the same facility continue to operate.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state or any interstate body.

"Personnel" or "facility personnel" means all persons who work at or oversee the operations of a hazardous waste facility and whose actions or failure to act may result in noncompliance with the requirements of 35 Ill. Adm. Code 724 or 725.

"Pile" means any noncontainerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage.

"Point source" means any discernible, confined and discrete conveyance including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

"Publicly owned treatment works" or "POTW" is as defined in 35 Ill. Adm. Code 310.110.

"Regional Administrator" means the Regional Administrator for the EPA Region in which the facility is located or the Regional Administrator's designee.

"Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, groundwater) which can be expected to exhibit the average properties of the universe or whole.

"Runoff" means any rainwater, leachate or other liquid that drains over land from any part of a facility.

"Runon" means any rainwater, leachate or other liquid that drains over land onto any part of a facility.

"Saturated zone" or "zone of saturation" means that part of the earth's crust in which all voids are filled with water.

"SIC Code" means Standard Industrial Code as defined in Standard Industrial Classification Manual, incorporated by reference in Section 720.111.

"Sludge" means any solid, semi-solid or liquid waste generated from a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.

"Small Quantity Generator" means a generator which generates less than 1000 kg of hazardous waste in a calendar month.

"Solid waste" means a solid waste as defined in 35 Ill. Adm. Code 721.102.

"Sump" means any pit or reservoir that meets the definition of tank and those troughs or trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment or disposal facilities.

"State" means any of the several states, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

"Storage" means the holding of hazardous waste for a temporary period, at the end of which the hazardous

waste is treated, disposed of or stored elsewhere.

"Surface impoundment" or "impoundment" means a facility or part of a facility which is a natural topographic depression, manmade excavation or diked area formed primarily of earthen materials (although it may be lined with manmade materials) which is designed to hold an accumulation of liquid wastes or wastes containing free liquids and which is not an injection well. Examples of surface impoundments are holding, storage, settling and aeration pits, ponds and lagoons.

"Tank" means a stationary device, designed to contain an accumulation of hazardous waste which is constructed primarily of nonearthen materials (e.g., wood, concrete, steel, plastic) which provide structural support.

"Tank system" means a hazardous waste storage or treatment tank and its associated ancillary equipment and containment system.

"Thermal treatment" means the treatment of hazardous waste in a device which uses elevated temperatures as the primary means to change the chemical, physical or biological character or composition of the hazardous waste. Examples of thermal treatment processes are incineration, molten salt, pyrolysis, calcination, wet air oxidation and microwave discharge. (See also "incinerator" and "open burning".)

"Totally enclosed treatment facility" means a facility for the treatment of hazardous waste which is directly connected to an industrial production process and which is constructed and operated in a manner which prevents the release of any hazardous waste or any constituent thereof into the environment during treatment. An example is a pipe in which waste acid is neutralized.

"Transfer facility" means any transportation related facility including loading docks, parking areas, storage areas and other similar areas where shipments of hazardous waste are held during the normal course of transportation.

"Transport vehicle" means a motor vehicle or rail car used for the transportation of cargo by any mode. Each cargo-carrying body (trailer, railroad freight car, etc.) is a separate transport vehicle.

"Transportation" means the movement of hazardous waste by air, rail, highway or water.

"Transporter" means a person engaged in the off-site transportation of hazardous waste by air, rail, highway or water.

"Treatability study" means:

A study in which a hazardous waste is subjected to a treatment process to determine:

Whether the waste is amenable to the treatment process.

What pretreatment (if any) is required.

The optimal process conditions needed to achieve the desired treatment.

The efficiency of a treatment process for a specific waste or wastes. Or,

The characteristics and volumes of residuals from a particular treatment process.

Also included in this definition for the purpose of 35 Ill. Adm. Code 721.104(e) and (f) exemptions are liner compatibility, corrosion and other material compatibility studies and toxicological and health effects studies. A "treatability study" is not a means to commercially treat or dispose of hazardous waste.

"Treatment" means any method, technique or process, including neutralization, designed to change the physical, chemical or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste or so as to render such waste non-hazardous or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage or reduced in volume.

"Treatment zone" means a soil area of the unsaturated zone of a land treatment unit within which hazardous constituents are degraded, transformed or immobilized.

"Underground injection" means the subsurface emplacement of fluids through a bored, drilled or driven well; or through a dug well, where the depth of the dug well is greater than the largest surface dimension. (See also "injection well".)

"Underground tank" means a device meeting the definition of "tank" whose entire surface area is totally below the surface of and covered by the ground.

"Unfit-for-use tank system" means a tank system that has been determined through an integrity assessment or other inspection to be no longer capable of storing or treating hazardous waste without posing a threat of release of hazardous waste to the environment.

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary.

"United States" means the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa and the Commonwealth of the Northern Mariana Islands.

"Unsaturated zone" or "zone of aeration" means the zone between the land surface and the water table.

"USEPA" means United States Environmental Protection Agency.

"Vessel" includes every description of watercraft, used or capable of being used as a means of transportation on the water.

"Wastewater treatment unit" means a device which:

Is part of a wastewater treatment facility which has an NPDES permit pursuant to 35 Ill. Adm. Code 309 or a pretreatment permit or authorization to discharge pursuant to 35 Ill. Adm. Code 310; and

Receives and treats or stores an influent wastewater which is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or generates and accumulates a wastewater treatment sludge which is a hazardous waste as defined in 35 Ill. Adm. Code 721.103, or treats or stores a wastewater treatment sludge which is a hazardous waste as defined in 35 Ill. Adm. Code 721.103; and

Meets the definition of tank or tank system in this Section.

"Water (bulk shipment)" means the bulk transportation of hazardous waste which is loaded or carried on board

a vessel without containers or labels.

"Well" means any shaft or pit dug or bored into the earth, generally of a cylindrical form, and often walled with bricks or tubing to prevent the earth from caving in.

"Well injection" (See "underground injection").

"Zone of engineering control" means an area under the control of the owner or operator that, upon detection of a hazardous waste release, can be readily cleaned up prior to the release of hazardous waste or hazardous constituents to groundwater or surface water.

(Source: Amended at 15 Ill. Reg. , effective
)

Section 720.111 References

- a) The following publications are incorporated by reference:

ANSI. Available from the American National Standards Institute, 1430 Broadway, New York, New York 10018, (212) 354-3300:

ANSI B31.3 and B31.4. See ASME/ANSI B31.3 and B31.4

API. Available from the American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005, (202) 682-8000:

"Guide for Inspection of Refinery Equipment, Chapter XIII, Atmospheric and Low Pressure Storage Tanks," 4th Edition, 1981, reaffirmed December, 1987.

"Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems," API Recommended Practice 1632, Second Edition, December, 1987.

"Installation of Underground Petroleum Storage Systems," API Recommended Practice 1615, Fourth Edition, November, 1987.

APTI. Available from the Air and Waste Management Association, Box 2861, Pittsburg, PA 15230, (412) 232-3444:

APTI Course 415: Control of Gaseous Emissions, EPA Publication EPA-450/2-81-005, December, 1981.

ASME. Available from the American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017, (212) 705-7722:

"Chemical Plant and Petroleum Refinery Piping", ASME/ANSI B31.3-1987, as supplemented by B31.3a-1988 and B31.3b-1988. Also available from ANSI.

"Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols", ASME/ANSI B31.4-1986, as supplemented by B31.4a-1987. Also available from ANSI.

ASTM. Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, (215) 299-5400:

~~"ASTM Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester," ASTM Standard D-3828-87.~~

ASTM D93-85, "ASTM Standard Test Methods for Flash Point by Pensky-Martens Closed Tester," ~~ASTM Standard D-93-79 or D-93-80~~ approved October 25, 1985.

ASTM D1946-90, Standard Practice for Analysis of Reformed Gas by Gas Chromatography, Approved March 30, 1990.

ASTM D2267-88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasolines by Gas Chromatography, approved November 17, 1988.

ASTM D2382-88, Standard Test Method for Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High Precision Method), approved October 31, 1988.

ASTM D2879-86, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved October 31, 1986.

ASTM D3828-87, Standard Test Methods for

Flash Point of Liquids by Setaflash Closed Tester, approved December 14, 1988.

ASTM E168-88, Standard Practices for General Techniques of Infrared Quantitative Analysis, approved May 27, 1988.

ASTM E169-87, Standard Practices for General Techniques of Ultraviolet-Visible Quantitative Analysis, approved February 1, 1987.

ASTM E260-85, Standard Practice for Packed Column Gas Chromatography, approved June 28, 1985.

GPO. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202) 783-3238:

Standard Industrial Classification Manual (1972), and 1977 Supplement, republished in 1983

NACE. Available from the National Association of Corrosion Engineers, 1400 South Creek Dr., Houston, TX 77084, (713) 492-0535:

"Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems", NACE Recommended Practice RP0285-85, approved March, 1985.

NFPA. Available from the National Fire Protection Association, Batterymarch Park, Boston, MA 02269, (617) 770-3000 or (800) 344-3555:

"Flammable and Combustible Liquids Code" NFPA 30, issued July 17, 1987. Also available from ANSI.

NTIS. Available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4600:

"Generic Quality Assurance Project Plan for Land Disposal Restrictions Program", EPA/530-SW-87-011, March 15, 1987. (Document number PB 88-170766.)

"Methods for Chemical Analysis of Water and Wastes", Third Edition, March, 1983.

(Document number PB 84-128677)

"Petitions to Delist Hazardous Wastes -- A Guidance Manual", EPA/530-SW-85-003, April, 1985. (Document Number PB 85-194488

"Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities", EPA-530/SW-611, 1977. (Document number PB 84-174820)

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication number SW-846 (Second Edition, 1982 as amended by Update I (April, 1984) and Update II (April, 1985)) (Document number PB 87-120291)

STI. Available from the Steel Tank Institute, 728 Anthony Trail, Northbrook, IL 60062, (312) 498-1980:

"Standard for Dual Wall Underground Steel Storage Tanks" (1986).

USEPA. Available from United States Environmental Protection Agency, Office of Drinking Water, State Programs Division, WH 550 E, Washington, D.C. 20460:

"Technical Assistance Document: Corrosion, Its Detection and Control in Injection Wells", EPA 570/9-87-002, August, 1987.

- b) Code of Federal Regulations. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202) 783-3238:

10 CFR 20, Appendix B ~~(1989)~~(1990)

40 CFR 60 (1990)

40 CFR 61, Subpart V (1990)

40 CFR 136 ~~(1989)~~(1990)

40 CFR 142 ~~(1989)~~(1990)

40 CFR 220 ~~(1989)~~(1990)

40 CFR 260.20 ~~(1989)~~(1990)

40 CFR 264 ~~(1989)~~(1990)

40 CFR 302.4, 302.5 and 302.6 ~~(1989)~~(1990)

40 CFR 761 ~~(1989)~~(1990)

c) Federal Statutes

Section 3004 of the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.), as amended through December 31, 1987.

d) This Section incorporates no later editions or amendments.

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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721.102	Definition of Solid Waste
721.103	Definition of Hazardous Waste
721.104	Exclusions
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Appendix A	Representative Sampling Methods
Appendix B	Method 1311 Toxicity Characteristic Leaching Procedure (TCLP)
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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. 1989, ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 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 Ill. 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 Ill. Reg. 24562, effective December 11, 1984; amended in R84-9, at 9 Ill. Reg. 11834, effective July 24, 1985; amended in R85-22 at 10 Ill. 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 Ill. Reg. 6035, effective March 24, 1987; amended in R86-46 at 11 Ill. 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 Ill. 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 Ill. 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. 14401, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16472, effective September 25, 1990; amended in R90-17 at 15 Ill. Reg. , effective , ; amended in R90-11 at 15 Ill. Reg. , effective , ; amended in R91-1 at 15 Ill. Reg. , effective

SUBPART A: GENERAL PROVISIONS

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.
 - 6) 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.

9) Spent wood preserving solutions that have been used and are reclaimed and reused for their original intended purpose.

b) Solid wastes which are not hazardous wastes. The following solid wastes are not hazardous wastes:

- 1) 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, picnic 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 contractual 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 toxicity characteristic (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 toxicity characteristic 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 non-oxidizing 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 beamhouse; 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/chrome 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.
- 7) 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, autoclaving or chlorination in preparation for leaching (except where the roasting or autoclaving or chlorination)/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 will include only the following wastes:
- A) Slag from primary copper processing;
 - B) Slag from primary lead processing;
 - C) Red and brown muds from bauxite refining;
 - D) Phosphogypsum from phosphoric acid production;
 - E) Slag from elemental phosphorus production;
 - F) Gasifier ash from coal gasification;

- G) Process wastewater from coal gasification;
 - H) Calcium sulfate wastewater treatment plant sludge from primary copper processing;
 - I) Slag tailings from primary copper processing;
 - J) Fluorogypsum from hydrofluoric acid production;
 - K) Process wastewater from hydrofluoric acid production;
 - L) Air pollution control dust/sludge from iron blast furnaces;
 - M) Iron blast furnace slag;
 - N) Treated residue from roasting/leaching of chrome ore;
 - O) Process wastewater from primary magnesium processing by the anhydrous process;
 - P) Process wastewater from phosphoric acid production;
 - Q) Basic oxygen furnace and open hearth furnace air pollution control dust/sludge from carbon steel production;
 - R) Basic oxygen furnace and open hearth furnace slag from carbon steel production;
 - S) Chloride processing waste solids from titanium tetrachloride production;
 - T) Slag from primary zinc smelting; and,
 - U) Until June 30, 1991, process wastewater, acid plant blowdown and wastewater treatment plant solids from primary zinc smelting and refining, except for wastewater treatment plant solids which are hazardous by characteristic and which are not processed.
- 8) Cement kiln dust waste.
- 9) Solid waste which consists of discarded wood or wood products which fails the test for the toxicity characteristic solely for arsenic and

which is not a hazardous waste for any other reason or reasons if the waste is generated by persons who utilize the arsenical-treated wood and wood products for these materials' intended end use.

- 10) Petroleum-contaminated media and debris that fail the test for the toxicity characteristic of Section 721.124 (hazardous waste codes D018 through D043 only) and are subject to corrective action regulations under 35 Ill. Adm. Code 731.
 - 11) Groundwater that exhibits the toxicity characteristic in Section 721.124 that is reinjected or reinfiltrated pursuant to existing hydrocarbon recovery operations undertaken at petroleum refineries, marketing terminals or bulk plants handling crude petroleum or intermediate products of petroleum refining until March 25, 1991.
- c) 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).
- 2) 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 shipment 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.
- 3) 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
 - C) The sample is being transported to the laboratory or 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 conducting 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 received" hazardous waste is subjected to initiation of treatability studies in any single day. "As received" waste refers to the waste as received 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.
- 5) 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 must be included for each treatability study conducted:
 - A) The name, address and USEPA identification number 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.
- 8) 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 721.103 and, if so, are subject to 35 Ill. Adm. Code 702, 703 and 721 through 728, unless the residues and unused samples 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 15 Ill. Reg. , effective
)

SUBPART D: LISTS OF HAZARDOUS WASTE

Section 721.131 Hazardous Wastes From Nonspecific Sources

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

EPA

Hazardous Industry and Hazardous Waste
Waste No.

Hazar
d
Code

- | | | |
|------|--|-----|
| F001 | 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 F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |
| F002 | The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, 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 F001, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. | (T) |

- F003 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 F001, F002, F004 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (I)
- F004 The following spent non-halogenated solvents: 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 F001, F002 or F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures. (T)
- F005 The following spent non-halogenated solvents: 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. (I, T)

- F006 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. (T)
- F019 See Below
- F007 Spent cyanide plating bath solutions from electroplating operations. (R, T)
- F008 Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process. (R, T)
- F009 Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process. (R, T)
- F010 Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process. (R, T)
- F011 Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations. (R, T)
- F012 Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process. (T)
- F019 Wastewater treatment sludges from the chemical conversion coating of aluminum except from zirconium phosphating in aluminum can washing when such phosphating is an exclusive conversion coating process. (T)

- F020 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 pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.) (H)
- F021 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 pentachlorophenol, or of intermediates used to produce its derivatives. (H)
- F022 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 hexachlorophene from highly purified 2,4,5- trichlorophenol. (H)

- F024 Process wastes including but not limited to, distillation residues, heavy ends, tars, and reactor cleanout 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. (This listing does not include wastewaters, wastewater treatment sludges, spent catalysts and wastes listed in this Section or Section 721.132.) (T)
- F025 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. (T)
- 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)
- F032 Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that currently use or have previously used chlorophenolic formulations (except potentially cross-contaminated wastes that have had the F032 waste code deleted in accordance with Section 721.135 and where the generator does not resume or initiate use of chlorophenolic formulations). This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol. (T)
- F034 Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use creosote formulations. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol. (T)
- F035 Wastewaters, process residuals, preservative drippage and spent formulations from wood preserving processes generated at plants that use inorganic preservatives containing arsenic or chromium. This listing does not include K001 bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote or pentachlorophenol. (T)
- F037 Petroleum refinery primary oil/water/solids separation sludge -- Any sludge generated from the gravitational separation of oil/water/solids during the storage or treatment of process wastewaters and oily cooling wastewaters from petroleum refineries. Such sludges include, but are not (T)

limited to, those generated in: oil/water/solids separators; tanks and impoundments; ditches and other conveyances; sumps; and stormwater units receiving dry weather flow. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated in aggressive biological treatment units as defined in subsection (b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units) and K051 wastes are not included in this listing.

- F038 Petroleum refinery secondary (emulsified) oil/water/solids separation sludge -- Any sludge or float generated from the physical or chemical separation of oil/water/solids in process wastewaters and oily cooling wastewaters from petroleum refineries. Such wastes include, but are not limited to, all sludges and floats generated in: induced air floatation (IAF) units, tanks and impoundments, and all sludges generated in DAF units. Sludges generated in stormwater units that do not receive dry weather flow, sludges generated in aggressive biological treatment units as defined in subsection (b)(2) (including sludges generated in one or more additional units after wastewaters have been treated in aggressive biological treatment units), F037, K048 and K051 wastes are not included in this listing. (T)
- F039 Leachate resulting from the treatment, storage or disposal of wastes classified by more than one waste code under Subpart D, or from a mixture of wastes classified under Subparts C and D. (Leachate resulting from the management of one or more of the following USEPA hazardous wastes and no other hazardous wastes retains its hazardous waste code(s): F020, F021, F022, F023, F026, F027 or F028.) (T)

~~(Board Note:~~ 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.)

b) Listing specific definitions.

1) For the purpose of the F037 and F038 listings, oil/water/solids is defined as oil or water or solids.

2) For the purposes of the F037 and F038 listings:

A) Aggressive biological treatment units are defined as units which employ one of the following four treatment methods: activated sludge; trickling filter; rotating biological contactor for the continuous accelerated biological oxidation of wastewaters; or, high-rate aeration. High-rate aeration is a system of surface impoundments or tanks, in which intense mechanical aeration is used to completely mix the wastes, enhance biological activity, and:

i) The units employ a minimum of 6 horsepower per million gallons of treatment volume; and either

ii) The hydraulic retention time of the unit is no longer than 5 days; or

iii) The hydraulic retention time is no longer than 30 days and the unit does not generate a sludge that is a hazardous waste by the toxicity characteristic.

B) Generators and treatment, storage or disposal (TSD) facilities have the burden of proving that their sludges are exempt from listing as F037 or F038 wastes under this definition. Generators and TSD facilities shall maintain, in their operating or other on site records, documents and data sufficient to prove that:

i) The unit is an aggressive biological treatment unit as defined in this subsection; and

ii) The sludges sought to be exempted from

F037 or F038 were actually generated in the aggressive biological treatment unit.

3) Time of generation. For the purposes of:

A) The F037 listing, sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement.

B) The F038 listing:

i) Sludges are considered to be generated at the moment of deposition in the unit, where deposition is defined as at least a temporary cessation of lateral particle movement; and

ii) Floats are considered to be generated at the moment they are formed in the top of the unit.

(Source: Amended at 15 Ill. Reg. , effective)

Section 721.135 Wood Preserving Wastes

a) Wastes from wood preserving processes at plants that do not resume or initiate use of chlorophenolic preservatives will not meet the listing definition of F032 once the generator has met all of the requirements of subsections (b) and (c). These wastes may, however, continue to meet another hazardous waste listing description or may exhibit one or more of the hazardous waste characteristics.

b) Generators shall either clean or replace all process equipment that may have come into contact with chlorophenolic formulations or constituents thereof, including, but not limited to, treatment cylinders, sumps, tanks, piping systems, drip pads, fork lifts and trams, in a manner which minimizes or eliminates the escape of hazardous waste, waste constituents, leachate, contaminated drippage or hazardous waste decomposition products to the groundwater, surface water or atmosphere. Generators shall do one of the following as specified in subsections (b)(1), (2) or (3):

1) Cleaning or replacement plan.

- A) Prepare and sign a written equipment cleaning or replacement plan that describes:
 - i) The equipment to be cleaned or replaced;
 - ii) How the equipment will be cleaned or replaced; And
 - iii) The appropriate solvent chosen to use in cleaning. And,
 - B) Conduct cleaning or replacement in accordance with the plan by replacing the equipment and managing the discarded equipment as F032 waste.
- 2) Cleaning.
- A) Remove all visible residues from process equipment.
 - B) Rinse process equipment with an appropriate solvent until dioxins and dibenzofurans are not detected in the final solvent rinse.
 - i) Rinses must be tested in accordance with SW-846, Method 8290, incorporated by reference in 35 Ill. Adm. Code 720.111.
 - ii) "Not detected" means at or below the lower method calibration limit (MCL) in Method 8290, Table 1.
 - C) Manage all residues from the cleaning process as F032 waste.
- 3) Document that previous equipment cleaning and replacement was performed in accordance with this Section and occurred after cessation of use of chlorophenolic preservatives.
- c) The generator shall maintain the following records documenting the cleaning and replacement as part of the facility's operating record:
- 1) The name and address of the facility;
 - 2) Formulations previously used and the date on which their use ceased in each process at the plant;
 - 3) Formulations currently used in each process at the

plant;

- 4) The equipment cleaning or replacement plan;
- 5) The name and address of any persons who conducted the cleaning and replacement;
- 6) The dates on which cleaning and replacement were accomplished;
- 7) The dates of sampling and testing;
- 8) A description of the sample handling and preparation techniques, including techniques used for extraction, containerization, preservation and chain-of-custody of the samples;
- 9) A description of the tests performed, the date the tests were performed and the results of the tests;
- 10) The name and model numbers of the instrument(s) used in performing the tests;
- 11) QA/QC documentation; and
- 12) The following statement signed by the generator or the generator's authorized representative:

I certify under penalty of law that all process equipment required to be cleaned or replaced under 35 Ill. Adm. Code 721.135 was cleaned or replaced as represented in the equipment cleaning and replacement plan and accompanying documentation. I am aware that there are significant penalties for providing false information, including the possibility of fine or imprisonment.

(Source: Added at 15 Ill. Reg. , effective)

Section 721.Appendix C Chemical Analysis Test Methods

The Board incorporates by reference 40 CFR 261, Appendix III (1989), as amended at 54 Fed. Reg. 41407, October 6, 1989, and as amended at 55 Fed. Reg. 8948, March 9, 1990(1990), as amended at 55 Fed. Reg. 50483, December 6, 1990. This Section incorporates no future editions or modifications.

(Source: Amended at 15 Ill. Reg. , effective)

Section 721.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.
- F002 Tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, 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 chlorophenoxy derivative acids, esters, ethers, amines and other salts.

- F024 Chloromethane, dichloromethane, trichloromethane, carbon tetrachloride, chloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethylene, 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, hexachlorocyclopentadiene, hexachlorocyclohexane, benzene, chlorobenzene, dichlorobenzenes, 1,2,4-trichlorobenzene, tetrachlorobenzenes, pentachlorobenzene, hexachlorobenzene, toluene, naphthalene.
- F025 Chloromethane, dichloromethane, trichloromethane; carbon tetrachloride; chloroethylene; 1,1-dichloroethane; 1,2-dichloroethane; trans-1,2-dichloroethylene; 1,1-dichloroethylene; 1,1,1-trichloroethane; 1,1,2-trichloroethane; trichloroethylene; 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; hexachlorocyclopentadiene; benzene; chlorobenzene; dichlorobenzene; 1,2,4-trichlorobenzene; tetrachlorobenzene; pentachlorobenzene; hexachlorobenzene; toluene; naphthalene.
- F026 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans.
- F027 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
- F028 Tetra-, penta-, and hexachlorodibenzo-p-dioxins; tetra-, penta-, and hexachlorodibenzofurans; tri-, tetra-, and pentachlorophenols and their chlorophenoxy derivative acids, esters, ethers, amine and other salts.
- F032 Benz(a)anthracene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, pentachlorophenol, arsenic, chromium, tetra-, penta-, hexa-, heptachlorodibenzo-p-dioxins, tetra-, penta-, hexa-, heptachlorodibenzofurans.
- F034 Benz(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, arsenic chromium.
- F035 Arsenic, chromium and lead.
- F037 Benzene, benzo(a)pyrene, chrysene, lead, chromium.

F038 Benzene, benzo(a)pyrene, chrysene, lead, chromium.

F039 All constituents for which treatment standards are specified for multi-source leachate (wastewaters and non-wastewaters) under 35 Ill. Adm. Code 728. Table B (Constituent Concentrations in Waste)

- K001 Pentachlorophenol, phenol, 2-chlorophenol, p-chloro-m-cresol, 2,4-dimethylphenol, 2,4-dinitrophenol, trichlorophenols, 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.
- K003 Hexavalent chromium, lead.
- K004 Hexavalent chromuim.
- K005 Hexavalent chromium, lead.
- K006 Hexavalent chromium.
- K007 Cyanide (complexed), hexavalent chromium.
- K008 Hexavalent chromium.
- K009 Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid.
- K010 Chloroform, formaldehyde, methylene chloride, methyl chloride, paraldehyde, formic acid, chloroacetaldehyde.
- K011 Acrylonitrile, acetonitrile, hydrocyanic acid.
- K013 Hydro cyanic acid, acrylonitrile, acetonitrile.
- K014 Acetonitrile, acrylamide.
- K015 Benzyl chloride, chlorobenzene, toluene, benzotrichloride.
- K016 Hexachlorobenzene, hexachlorobutadiene, carbon tetrachloride, hexachloroethane, perchloroethylene.
- K017 Epichlorohydrin, chloroethers [bis(chloromethyl) ether and bis-(2-chloroethyl) ethers], trichloropropane, dichloropropanols.
- K018 1,2-dichloroethane, trichloroethylene, hexachlorobutadiene, hexachlorobenzene.

- K019 Ethylene dichloride, 1,1,1-trichloroethane, 1,1,2-trichloroethane, 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-tetrachloroethane), trichloroethylene, tetrachloroethylene, carbon tetrachloride, chloroform, vinyl chloride, vinylidene chloride.
- K021 Antimony, carbon tetrachloride, chloroform.
- K022 Phenol, tars (polycyclic aromatic hydrocarbons).
- K023 Phthalic anhydride, maleic anhydride.
- K024 Phthalic anhydride, 1,4-naphthoquinone.
- 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.
- K033 Hexachlorocyclopentadiene.
- K034 Hexachlorocyclopentadiene.
- K035 Creosote, chrysene, naphthalene, fluoranthene, benzo(b) fluoranthene, benzo(a)-pyrene, indeno(1,2,3-cd) pyrene, benzo(a)anthracene, dibenzo(a)anthracene, acenaphthalene.
- K036 Toluene, phosphorodithioic and phosphorothioic acid esters.
- K037 Toluene, phosphorodithioic and phosphorothioic acid esters.

- K038 Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
- K039 Phosphorodithioic and phosphorothioic acid esters.
- K040 Phorate, formaldehyde, phosphorodithioic and phosphorothioic acid esters.
- K041 Toxaphene.
- K042 Hexachlorobenzene, ortho-dichlorobenzene.
- K043 2,4-dichlorophenol, 2,6-dichlorophenol, 2,4,6-trichlorophenol.
- K044 N.A.
- K045 N.A.
- K046 Lead
- K047 N.A.
- K048 Hexavalent chromium, lead.
- K049 Hexavalent chromium, lead.
- K050 Hexavalent chromium.
- K051 Hexavalent chromium, lead.
- K052 Lead
- K060 Cyanide, naphthalene, phenolic compounds, arsenic.
- K061 Hexavalent chromium, lead, cadmium.
- 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.
- K084 Arsenic.
- 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.
- K104 Aniline, benzene, diphenylamine, nitrobenzene, phnylenedi-amine.
- K105 Benzene, monochlorobenzene, dichlorobenzenes, 2,4,6-tri-chlorophenol.
- K106 Mercury.
- K107 1,1-Dimethylhydrazine (UDMH)

K108 1,1-Dimethylhydrazine (UDMH)

K109 1,1-Dimethylhydrazine (UDMH)

K110 1,1-Dimethylhydrazine (UDMH)

K111 2,4-Dinitrotoluene.

K112 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.

K113 2,4-Toluenediamine, o-toluidine, p-toluidine, aniline.

K114 2,4-Toluenediamine, o-toluidine, p-toluidine.

K115 2,4-Toluenediamine.

K116 Carbon tetrachloride, tetrachloroethylene, chloroform, phosgene.

K117 Ethylene dibromide

K118 Ethylene dibromide

K123 Ethylene thiourea

K124 Ethylene thiourea

K125 Ethylene thiourea

K126 Ethylene thiourea

K131 Dimethyl sulfate, methyl bromide

K132 Methyl bromide

K136 Ethylene dibromide

N.A.--Waste is hazardous because it fails the test for the characteristic of ignitability, corrosivity or reactivity.

(Source: Amended at 15 Ill. Reg. , effective)

Section 721.Appendix H Hazardous Constituents

Common Name	Chemical Abstracts Name	Chemical Abstracts Number	Hazardous Waste 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-Acetyl-2-thiourea	Acetamide, N-(aminothioxomethyl)-	591-08-2	P002
Acrolein	2-Propenal	107-02-8	P003
Acrylamide	2-Propenamamide	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	1, 4, 5, 8-Dimethanonaphthalene, 1, 2, 3, 4, 10, 10-hexachloro-1, 4, 4a, 5, 8, 8a-hexahydro-, 1-alpha, 4-alpha, 4a-beta, 5-alpha, 8-alpha, 8a-beta)-	309-00-2	P004
Allyl alcohol	2-Propen-1-ol	107-18-6	P005
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	U119
Aniline	Benzenamine	62-53-3	U012
Antimony	Same	7440-36-0	
Antimony compounds, N.O.S. (not otherwise specified)			
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 H3AsO4	7778-39-4	P010
Arsenic pentoxide	Arsenic oxide As2O5	1303-28-2	P011
Arsenic trioxide	Arsenic oxide As2O3	1327-53-3	P012
Auramine	Benzenamine, 4, 4'-carbonimidoyl-bis[N, N-dimethyl-	492-80-8	U014
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, (dichloromethyl)-	98-87-3	U017
Benzene	Same	71-43-2	U018
Benzeneearsonic acid	Arsenic 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(k)fluoranthene	Same	207-08-9	
Benzo[a]pyrene	Same	50-32-8	U022
p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4	U197
Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7	U023
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	P017
Bromoform	Methane, tribromo-	75-25-2	U225
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 phenylmethyl ester	85-68-7	
Cacodylic acid	Arsenic acid, dimethyl-	75-60-5	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 cyanide Ca(CN) ₂	592-01-8	P021
Carbon disulfide	Same	75-15-0	P022
Carbon oxyfluoride	Carbonic difluoride	353-50-4	U033
Carbon tetrachloride	Methane, tetrachloro-	56-23-5	U211
Chloral	Acetaldehyde, trichloro-	75-87-6	U034
Chlorambucil	Benzenebutanoic acid, 4[bis-(2-chloroethyl)amino]-	305-03-3	U035
Chlordane	4, 7-Methano-1H-indene, 1, 2, 4, 5, 6, 7, 8, 8-octachloro-2, 3, 3a, 4, 7, 7a-hexahydro-	57-74-9	U036
Chlordane, alpha and gamma isomers			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	Naphthalenamine, N, N'-bis(2-chloroethyl)-	494-03-1	U026
Chloroacetaldehyde	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
o-Chlorophenol	Phenol, 2-chloro-	95-57-8	U048
1-(o-Chlorophenyl)thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1	P026
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-dimethoxyphenyl)azo]-	6358-53-8	
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 complexes), N.O.S.			P030
Cyanogen	Ethanedinitrile	460-19-5	P031
Cyanogen bromide	Cyanogen bromide (CN)Br	506-68-3	U246
Cyanogen chloride	Cyanogen chloride (CN)Cl	506-77-4	P033
Cycasin	Beta-D-glucopyranoside, (methyl-ONN-azoxy)methyl-	14901-08-7	
2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5	P034
Cyclophosphamide	2H-1, 3, 2-Oxazaphosphorin-2-amine, N, N-bis(2-chloroethyl)tetrahydro-, 2-oxide	50-18-0	U058
2,4-D	Acetic acid, (2,4-dichlorophenoxy)-	94-75-7	U240

2,4-D, salts and esters	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters		U240
Daunomycin	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-L-methoxy-, 8S-cis-	20830-81-3	U059
DDD	Benzene, 1,1'-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8	U060
DDE	Benzene, 1, 1'-(dichloroethenylidene)bis[4-chloro-	72-55-9	
DDT	Benzene, 1, 1'-(2, 2, 2-trichloroethylidene)bis[4-chloro-	50-29-3	U061
Diallate	Carbamothioic acid, bis(1-methylethyl)-, S-(2, 3-dichloro-2-propenyl) ester	2303-16-4	U062
Dibenz[a,h]acridine	Same	226-36-8	
Dibenz[a,j]acridine	Same	224-42-0	
Dibenz[a,h]anthracene	Same	53-70-3	U063
7H-Dibenzo[c,g]carbazole	Same	194-59-2	
Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	192-65-4	
Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0	
Dibenzo[a,i]pyrene	Benzo[rs]t]pentaphene	189-55-9	U064
1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8	U066
Dibutyl phthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2	U069
o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1	U070
m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1	U071
p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7	U072
Dichlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-6	
3,3'-Dichlorobenzidine	[1, 1'-Biphenyl]-4, 4'-diamine, 3, 3'-dichloro-	91-94-1	U073
1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0	U074
Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8	U075
Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2	
1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4	U078
1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5	U079
Dichloroethyl ether	Ethane, 1,1'-oxybis[2-chloro-	111-44-4	U025
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
Dichloromethyl ether	Methane, oxybis[chloro-	542-88-1	P016
2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2	U081
2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0	U082
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]-oxirene, 3, 4, 5, 6, 9, 9-hexachloro-1a, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a alpha, 2 beta, 2a alpha, 3 beta, 6 beta, 6a alpha, 7 beta, 7a alpha)-	60-57-1	P037
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-	1615-80-1	U086

0,0-Diethyl-S-methyl dithiophosphate	Phosphorodithioic acid, 0,0-diethyl S-methyl ester	3288-58-2	U087
Diethyl-p-nitrophenyl phosphate	Phosphoric acid, diethyl 4-nitrophenyl ester	311-45-5	P041
Diethyl phthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2	U088
0,0-Diethyl 0-pyrazinyl phosphorothioate	Phosphorothioic acid, 0,0-diethyl 0-pyrazinyl ester	297-97-2	P040
Diethylstilbestrol	Phenol, 4,4'-(1,2-diethyl-1,2-ethenediyl)bis-, (E)-	56-53-1	U089
Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6	U090
Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4	P043
Dimethoate	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl] ester	60-51-5	P044
3,3'-Dimethoxybenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethoxy-	119-90-4	U091
p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenyl-azo)-	60-11-7	U093
7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6	U094
3,3'-Dimethylbenzidine	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	119-93-7	U095
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-dimethyl-	540-73-8	U099
alpha,alpha-Dimethylphenethylamine	Benzeneethanamine, alpha, alpha-dimethyl-	122-09-8	P046
2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9	U101
Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3	U102
Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1	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-methyl-2,4-dinitro-	121-14-2	U105
2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2	U106
Dinoseb	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	88-85-7	P020
Di-n-octyl phthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0	U107
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, 0, 0-diethyl S-[2-(ethylthio)ethyl] ester	298-04-4	P039
Dithiobiuret	Thioimidodicarbonic diamide [(H2N)C(S)]2NH	541-53-7	P049
Endosulfan	6, 9-Methano-2, 4, 3-benzodioxathiepen, 6, 7, 8, 9, 10, 10-hexachloro-1, 5, 5a, 6, 9, 9a-hexahydro-, 3-oxide,	115-29-7	P050
Endothal	7-Oxabicyclo[2.2.1]heptane-2, 3-dicarboxylic acid	145-73-3	P088
Endrin	2, 7:3, 6-Dimethanonaphth[2, 3-b]oxirene, 3, 4, 5, 6, 9, 9-hexachloro-1a, 2, 2a, 3, 6, 6a, 7, 7a-octahydro-, (1a 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-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-, (R)-	51-43-4	P042
Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6	U238
Ethyl cyanide	Propanenitrile	107-12-0	P101
Ethylenebisdithiocarbamic acid	Carbamodithioic acid, 1,2-ethane-diylobis-	111-54-6	U114
Ethylenebisdithiocarbamic acid, salts and esters			U114
Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4	U067
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
Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3	U076
Ethyl methacrylate	2-Propenoic acid, 2-methyl-, ethyl ester	97-63-2	U118
Ethyl methanesulfonate	Methanesulfonic acid, ethyl ester	62-50-0	U119
Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl] O,O-dimethyl ester	52-85-7	P097
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
Formaldehyde	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, 7, 8, 8-heptachloro-3a, 4, 7, 7a-tetrahydro-	76-44-8	P059
Heptachlor epoxide	2, 5-Methano-2H-indeno[1, 2b]oxirene, 2, 3, 4, 5, 6, 7, 7-heptachloro-1a, 1b, 5, 5a, 6, 6a-hexahydro-, (1a alpha, 1b beta, 2 alpha, 5 alpha, 5a beta, 6 beta, 6a alpha)-	1024-57-3	
Heptachlor epoxide (alpha, beta and gamma isomers)			
<u>Heptachlorodibenzofurans</u>			
<u>Heptachlorodibenzo-p-dioxins</u>			
Hexachlorobenzene	Benzene, hexachloro-	118-74-1	U127
Hexachlorobutadiene	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	87-68-3	U128
Hexachlorocyclo-pentadiene	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	77-47-4	U130
Hexachlorodibenzo-p-dioxins			
Hexachlorodibenzofurans			
Hexachloroethane	Ethane, hexachloro-	67-72-1	U131
Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4	U132
Hexachloropropene	1-Propene, 1,1,2,3,3,3-hexachloro-	1888-71-7	U243
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
Indeno[1,2,3-cd]pyrene	Same	193-39-5	U137
Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1	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[cd]-pentalen-2-one, 1, 1a, 3, 3a, 4, 5, 5, 5a, 5b, 6-decachlorooctahydro-,	143-50-0	U142
Lasiocarpine	2-Butenoic acid, 2-methyl-, 7-[[2, 3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2, 3, 5, 7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-[1-alpha(Z), 7(2S*, 3R*)], 7a alpha]]-	303-34-1	U143
Lead	Same	7439-92-1	
Lead and compounds, N.O.S.			
Lead acetate	Acetic acid, lead (2+) salt	301-04-2	U144
Lead phosphate	Phosphoric acid, lead (2+) salt (2:3)	7446-27-7	U145
Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6	U146
Lindane	Cyclohexane, 1,2,3,4,5,6-hexachloro-, 1 alpha, 2 alpha, 3 beta, 4 alpha, 5 alpha, 6 beta)-	58-89-9	U129
Maleic anhydride	2,5-Furandione	108-31-6	U147
Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1	U148
Malononitrile	Propanedinitrile	109-77-3	U149
Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	148-82-3	U150
Mercury	Same	7439-97-6	U151
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	1,2-Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-	91-80-5	U155
Metholmyl	Ethanimidothioic acid, N-[[methylamino)carbonyl]oxy]-, methyl ester	16752-77-5	P066
Methoxychlor	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis[4-methoxy-	72-43-5	U247
Methyl bromide	Methane, bromo-	74-83-9	U029
Methyl chloride	Methane, chloro-	74-87-3	U045
Methylchlorocarbonate	Carbonochloridic acid, methyl ester	79-22-1	U156
Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6	U226
3-Methylcholanthrene	Benz[<i>j</i>]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5	U157
4,4'-Methylenebis(2-chloroaniline)	Benzenamine, 4,4'-methylenebis[2-chloro-	101-14-4	U158
Methylene bromide	Methane, dibromo-	74-95-3	U068
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	1338-23-4	U160
Methyl hydrazine	Hydrazine, methyl-	60-34-4	P068
Methyl iodide	Methane, iodo-	74-88-4	U138
Methyl isocyanate	Methane, isocyanato-	624-83-9	P064
2-Methylactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5	P069
Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6	U162
Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3	
Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0	P071

Methylthiouracil	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2	U164
Mitomycin 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 alpha, 8b alpha)]]-,	50-07-7	U010
MNNG	Guanidine, N-methyl-N'-nitro-N-nitroso-	70-25-7	U163
Mustard gas	Ethane, 1,1'-thiobis[2-chloro-	505-60-2	U165
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	U168
alpha-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4	P072
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-pyrrolidinyl)-, (S)-	54-11-5	P075
Nicotine salts			P075
Nitric oxide	Nitrogen oxide NO	10102-43-9	P076
p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6	P077
Nitrobenzene	Benzene, nitro-	98-95-3	P078
Nitrogen dioxide	Nitrogen oxide NO ₂	10102-44-0	P078
Nitrogen mustard	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-	51-75-2	
Nitrogen mustard, hydrochloride salt			
Nitrogen mustard N-oxide	Ethanamine, 2-chloro-N-(2-chloroethyl)-N-methyl-, N-oxide	126-85-2	
Nitrogen mustard, N-oxide, hydrochloride 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-butyl-N-nitroso-	924-16-3	U172
N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7	U173
N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5	U174
N-Nitrosodimethylamine	Methanamine, N-methyl-N-nitroso-	62-75-9	P082
N-Nitroso-N-ethylurea	Urea, N-ethyl-N-nitroso-	759-73-9	U176
N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6	
N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5	U177
N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-, ethyl ester	615-53-2	U178
N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0	P084
N-Nitrosomorpholine	Morpholine, 4-nitroso-	59-89-2	
N-Nitrosornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8	
N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4	U179
N-Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2	U180
N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9	
5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8	U181
Octamethylpyrophosphoramidate	Diphosphoramidate, octamethyl-	152-16-9	P085
Osmium tetroxide	Osmium oxide OsO ₄ , (T-4)	20816-12-0	P087
Paraldehyde	1,3,5-Trioxane, 2,4,6-trimethyl-	123-63-7	U182
Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2	P089
Pentachlorobenzene	Benzene, pentachloro-	608-93-5	U183
Pentachlorodibenzo-p-dioxins			
Pentachlorodibenzofurans			

Pentachloroethane	Ethane, pentachloro-	76-01-7	U184
Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8	U185
Pentachlorophenol	Phenol, pentachloro-	87-86-5	See F027
Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2	U187
Phenol	Same	108-95-2	U188
Phenylenediamine	Benzenediamine	25265-76-3	
Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4	P092
Phenylthiourea	Thiourea, phenyl-	103-85-5	P093
Phosgene	Carbonic dichloride	75-44-5	P095
Phosphine	Same	7803-51-2	P096
Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio)methyl] ester	298-02-2	P094
Phthalic acid esters, N.O.S.			
Phthalic anhydride	1,3-Isobenzofurandione	85-44-9	U190
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-C)-, potassium)	506-61-6	P099
Pronamide	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5	U192
1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4	U193
n-Propylamine	1-Propanamine	107-10-8	U194
Propargyl alcohol	2-Propyn-1-ol	107-19-7	P102
Propylene dichloride	Propane, 1,2-dichloro-	78-87-5	U083
1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8	P067
Propylthiouracil	4(1H)-Pyrimidinone, 2,3-dihydro-6-propyl-2-thioxo-	51-52-5	
Pyridine	Same	110-86-1	U196
Reserpine	Yohimban-16-carboxylic acid, 11, 17-dimethoxy-18-[(3, 4, 5-trimethoxybenzoyl)oxy]-, methyl ester, (3 beta, 16 beta, 17 alpha, 18 beta, 20 alpha)-,	50-55-5	U200
Resorcinol	1,3-Benzenediol	108-46-3	U201
Saccharin	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide	81-07-2	U202
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	U204
Selenium sulfide	Selenium sulfide SeS2	7488-56-4	U205
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-trichlorophenoxy)-	93-72-1	See F027
Sodium cyanide	Sodium cyanide NaCN	143-33-9	P106
Streptozotocin	D-Glucose, 2-deoxy-2-[[methyl-nitrosoamino)carbonyl]amino]-	18883-66-4	U206
Strychnine	Strychnidin-10-one	57-24-9	P108
Strychnine salts			P108
TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6	
1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3	U207
Tetrachlorodibenzo-p-dioxins			
Tetrachlorodibenzofurans			
Tetrachloroethane, N.O.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	Ethane, 1,1,2,2-tetrachloro-	79-34-5	U209
Tetrachloroethylene	Ethene, tetrachloro-	127-18-4	U210

2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2	See F027
Tetraethyldithiopyrophosphate	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 Tl2O3	1314-32-5	P113
Thallium (I) acetate	Acetic acid, thallium (1+) salt	563-68-8	U214
Thallium (I) carbonate	Carbonic acid, dithallium (1+) salt	6533-73-9	U215
Thallium (I) chloride	Thallium chloride TlCl	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-1-(methylthio)-, O-[(methylamino)carbonyl]-oxime	39196-18-4	P045
Thiomethanol	Methanethiol	74-93-1	U153
Thiophenol	Benzenethiol	108-98-5	P014
Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6	P116
Thiourea	Same	62-56-6	P219
Thiram	Thioperoxydicarbonic diamide [(H2N)C(S)]2S2, tetramethyl-	137-26-8	U244
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	
Toluene-2,6-diamine	1,3-Benzenediamine, 2-methyl-	823-40-5	
Toluene-3,4-diamine	1,2-Benzenediamine, 4-methyl-	496-72-0	
Toluene diisocyanate	Benzene, 1,3-diisocyanatomethyl-	26471-62-5	U223
o-Toluidine	Benzenamine, 2-methyl-	95-53-4	U328
o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5	U222
p-Toluidine	Benzenamine, 4-methyl-	106-49-0	U353
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	U227
Trichloroethylene	Ethene, trichloro-	79-01-6	U228
Trichloromethanethiol	Methanethiol, trichloro-	75-70-7	P118
Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4	U121
2,4,5-Trichlorophenol	Phenol, 2,4,5-trichloro-	95-95-4	See F027
2,4,6-Trichlorophenol	Phenol, 2,4,6-trichloro-	88-06-2	See F027
2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5	See F027
Trichloropropane, N.O.S.		25735-29-9	
1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4	
O,0,0-Triethylphosphorothioate	Phosphorothioic acid, O,0,0-triethyl ester	126-68-1	
1,3,5-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4	U234
Tris(l-aziridinyl)phosphine sulfide	Aziridine, 1,1',1"-phosphinothioylidynetris-	52-24-4	
Tris(2,3-dibromopropyl) phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7	U235
Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxy-, tetrasodium salt	72-57-1	U236
Uracil mustard	2,4-(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1	U237
Vanadium pentoxide	Vanadium oxide V2O5	1314-62-1	P120

Vinyl chloride	Ethene, chloro-	75-01-4	U043
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations less than 0.3%.	81-81-2	U248
Warfarin	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, when present at concentrations greater than 0.3%.	81-81-2	P001
Warfarin salts, when present at concentrations less than 0.3%.			U248
Warfarin salts, when present at concentrations greater than 0.3%.			P001
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	P122
Zinc phosphide	Zinc phosphide P_2Zn_3 , when present at concentrations of 10% or less.	1314-84-7	U249

(Source: Amended at 15 Ill. Reg. , effective
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TITLE 35: ENVIRONMENTAL PROTECTION
 SUBTITLE G: WASTE DISPOSAL
 CHAPTER I: POLLUTION CONTROL BOARD
 SUBCHAPTER c: HAZARDOUS WASTE OPERATING REQUIREMENTS

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 STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE

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 722.110 Purpose, Scope and Applicability
 722.111 Hazardous Waste Determination
 722.112 USEPA Identification Numbers

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SUBPART G: FARMERS

Section
722.170 Farmers

Appendix A Hazardous Waste Manifest

AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 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 Ill. Reg. 2518, effective February 22, 1983; amended in R84-9 at 9 Ill. Reg. 11950, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1131, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14112, effective August 12, 1986; amended in R86-19 at 10 Ill. Reg. 20709, effective December 2, 1986; amended in R86-46 at 11 Ill. Reg. 13555, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19392, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13129, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 452, effective December 27, 1988; amended in R89-1 at 13 Ill. Reg. 18523, effective November 13, 1989; amended in R90-10 at 14 Ill. Reg. 16653, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. , effective ; amended in R91-1 at 15 Ill. Reg. , effective

SUBPART C: PRE-TRANSPORT REQUIREMENTS

Section 722.134 Accumulation Time

- a) Except as provided in subsections (d), (e) or (f), a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status provided that:
 - 1) The waste is placed in containers and the generator complies with 35 Ill. Adm. Code 725.Subpart I or the waste is placed in tanks and the generator complies with 35 Ill. Adm. Code 725.Subpart J except 35 Ill. Adm. Code 725.297(c) and 725.300. In addition, such a generator is exempt from all the requirements in 35 Ill. Adm. Code 725.Subparts G and H, except for 35 Ill. Adm. Code 725.211 and 725.214;
 - 2) The waste is placed on drip pads and the generator complies with 35 Ill. Adm. Code 725.Subpart W and maintains the following records at the facility:

- A) A description of the procedures that will be followed to ensure that all wastes are removed from the drip pad and associated collection system at least once every 90 days; and
 - B) Documentation of each waste removal, including the quantity of waste removed from the drip pad and the sump or collection system and the date and time of removal.
 - C) In addition, such a generator is exempt from all the requirements in 35 Ill. Adm. Code 725.Subparts G and H, except for 35 Ill. Adm. Code 725.211 and 725.214.
- 3) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;
 - 34) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste", and
 - 45) The generator complies with the requirements for owners or operators in 35 Ill. Adm. Code 725.Subparts C and D, and with 35 Ill. Adm. Code 725.116 and 728.107(a)(4).
- b) A generator who accumulates hazardous waste for more than 90 days is an operator of a storage facility and is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 702, 703 and 705 unless the generator has been granted an extension of the 90-day period. If hazardous wastes must remain on-site for longer than 90 days due to unforeseen, temporary, and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of a variance or provisional variance, pursuant to Section 37 of the Environmental Protection Act.
 - c) Accumulation near point of generation.
 - 1) A generator may accumulate as much as 55 gallons of hazardous waste or one quart of acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in containers at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste, without a permit or

interim status and without complying with paragraph (a) provided the generator:

- A) Complies with 35 Ill. Adm. Code 725.271, 725.272 and 725.273(a); and
 - B) marks the generator's containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.
- 2) A generator who accumulates either hazardous waste or acutely hazardous waste listed in 35 Ill. Adm. Code 721.133(e) in excess of the amounts listed in subsection (c)(1) at or near any point of generation must, with respect to that amount of excess waste, comply within three days with subsection (a) or other applicable provisions of this chapter. During the three day period the generator must continue to comply with subsection (c)(1). The generator must mark the container holding the excess accumulation of hazardous waste with the date the excess amount began accumulating.
- d) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month may accumulate hazardous waste on-site for 180 days or less without a permit or without having interim status provided that:
- 1) The quantity of waste accumulated on-site never exceeds 6000 kilograms;
 - 2) The generator complies with the requirements of 35 Ill. Adm. Code 725.Subpart I, except the generator need not comply with 35 Ill. Adm. Code 725.276;
 - 3) The generator complies with the requirements of 35 Ill. Adm. Code 725.301;
 - 4) The generator complies with the requirements of subsections (a)(2) and (a)(3) and the requirements of 35 Ill. Adm. Code 725.Subpart C; and
 - 5) The generator complies with the following requirements:
 - A) At all times there must be at least one employee either on the premises or on call (i.e., available to respond to an emergency by reaching the facility within a short

period of time) with the responsibility for coordinating all emergency response measures specified in subsection (d)(4)(D). The employee is the emergency coordinator.

- B) The generator shall post the following information next to the telephone:
- i) The name and telephone number of the emergency coordinator:
 - ii) Location of fire extinguishers and spill control material, and if present, fire alarm: and
 - iii) The telephone number of the fire department, unless the facility has a direct alarm.
- C) The generator shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities during normal facility operations and emergencies:
- D) The emergency coordinator or designee shall respond to any emergencies that arise. The applicable responses are as follows:
- i) In the event of a fire, call the fire department or attempt to extinguish it using a fire extinguisher:
 - ii) In the event of a spill, contain the flow of hazardous waste to the extent possible, and as soon as is practicable, clean up the hazardous waste and any contaminated materials or soil:
 - iii) In the event of a fire, explosion or other release which could threaten human health outside the facility or when the generator has knowledge that a spill has reached surface water, the generator shall immediately notify the National Response Center (using its 24-hour toll free number 800/424-8802). The report must include the following information: the name, address and USEPA identification number (35 Ill. Adm. Code 722.112) of the generator; date, time and type of incident (e.g., spill or

fire); quantity and type of hazardous waste involved in the incident; extent of injuries, if any; and, estimated quantity and disposition of recoverable materials, if any.

- e) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who must transport the waste, or offer the waste for transportation, over a distance of 200 miles or more for off-site treatment, storage or disposal may accumulate hazardous waste on-site for 270 days or less without a permit or without having interim status provided that the generator complies with the requirements of subsection (d).

- f) A generator who generates greater than 100 kilograms but less than 1000 kilograms of hazardous waste in a calendar month and who accumulates hazardous waste in quantities exceeding 6000 kg or accumulates hazardous waste for more than 180 days (or for more than 270 days if the generator must transport the waste, or offer the waste for transportation, over a distance of 200 miles or more) is an operator of a storage facility and is subject to the requirements of 35 Ill. Adm. Code 724 and 725 and the permit requirements of 35 Ill. Adm. Code 703 unless the generator has been granted an extension to the 180-day (or 270-day if applicable) period. If hazardous wastes must remain on-site for longer than 180 days (or 270 days if applicable) due to unforeseen, temporary and uncontrollable circumstances, the generator may seek an extension of up to 30 days by means of variance or provisional variance pursuant to Section 37 of the Environmental Protection Act.

(Source: Amended at 15 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 TOR.

- B) The generator shall post the following information next to the telephone:
- i) The name and telephone number of the emergency coordinator:
 - ii) Location of fire extinguishers and spill control material, and if present, fire alarm: and
 - iii) The telephone number of the fire department, unless the facility has a direct alarm.
- C) The generator shall ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, re
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AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111 1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R82-19, 53 PCB 131, at 7 Ill. Reg. 14059, effective October 12, 1983; amended in R84-9 at 9 Ill. Reg. 11964, effective July 24, 1985; amended in R85-22 at 10 Ill. Reg. 1136, effective January 2, 1986; amended in R86-1 at 10 Ill. Reg. 14119, effective August 12, 1986; amended in R86-28 at 11 Ill. Reg. 6138, effective March 24, 1987; amended in R86-28 at 11 Ill. Reg. 8684, effective April 21, 1987; amended in R86-46 at 11 Ill. Reg. 13577, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19397, effective November 12, 1987; amended in R87-39 at 12 Ill. Reg. 13135, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 458, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18527, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14511, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16658, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. , effective ; amended in R91-1 at 15 Ill. Reg. , effective

SUBPART J: TANK SYSTEMS

Section 724.290	Applicability
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The requirements of this Subpart apply to owners and operators of facilities that use tank systems for ~~treating or storing~~ treating hazardous waste, except as otherwise provided in

subsections (a), ~~or~~ (b) or (c) or in Section 724.101.

- a) Tank systems that are used to store or treat hazardous waste which contains no free liquids and are situated inside a building with an impermeable floor are exempted from the requirements in Section 724.293. To demonstrate the absence or presence of free liquids in the stored or treated waste, EPA Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes Physical/Chemical Methods "EPA Publication No. SW-846), incorporated by reference in 35 Ill. Adm. Code 720.111, must be used.
- b) Tank systems, including sumps, as defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 724.293(a).
- c) Tanks, sumps and other such collection devices or systems used in conjunction with drip pads, as defined in 35 Ill. Adm. Code 720.110 and regulated under Subpart W, must meet the requirements of this Subpart.

(Source: Amended at 15 Ill. Reg. , effective)

SUBPART W: DRIP PADS

Section 724.670 Applicability

- a) The requirements of this Subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage to an associated collection system.
 - 1) "Existing drip pads" are:
 - A) Those constructed before December 6, 1990; and
 - B) Those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990.
 - 2) All other drip pads are "new drip pads".
- b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under Section

724.672(e) or (f).

(Source: Added at 15 Ill. Reg. , effective
)

Section 724.671 Assessment of existing drip pad integrity

- a) For each existing drip pad, the owner or operator shall evaluate the drip pad and determine that it meets all of the requirements of this Subpart, except the requirements for liners and leak detection systems of Section 724.672(b). No later than June 6, 1991, the owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and re-certified annually until all upgrades, repairs or modifications necessary to achieve compliance with all of the standards of Section 724.672 are complete. The evaluation must document the extent to which the drip pad meets each of the design and operating standards of Section 724.672, except the standards for liners and leak detection systems, specified in Section 724.672(b), and must document the age of the drip pad to the extent possible, to document compliance with subsection (b).
- b) The owner or operator shall develop a written plan for upgrading, repairing and modifying the drip pad to meet the requirements of Section 724.672(b) and submit the plan to the Agency no later than 2 years before the date that all repairs, upgrades and modifications will be complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 724.672 and must document the age of the drip pad to the extent possible. The plan must be reviewed and certified by an independent qualified, registered professional engineer. All upgrades, repairs and modifications must be completed in accordance with the following:
- 1) For existing drip pads of known and documentable age, all upgrades, repairs and modifications must be completed by June 6, 1993, or when the drip pad has reached 15 years of age, whichever comes later.
 - 2) For existing drip pads for which the age cannot be documented, by June 6, 1999; but, if the age of the facility is greater than 7 years, all

upgrades, repairs and modifications must be completed by the time the facility reaches 15 years of age or by June 6, 1993, whichever comes later.

3) The owner or operator may petition the Board for an extension of the deadline in subsection (b)(1) or (2).

A) The owner or operator shall file a petition for a RCRA variance as specified in 35 Ill. Adm. Code 104.

B) The Board will grant the petition for extension if it finds that:

i) The drip pad meets all of the requirements of Section 724.672, except those for liners and leak detection systems specified in Section 724.672(b); and

ii) That it will continue to be protective of human health and the environment.

c) Upon completion of all repairs and modifications, the owner or operator shall submit to the Agency, the as-built drawings for the drip pad, together with a certification by an independent, qualified, registered professional engineer attesting that the drip pad conforms to the drawings.

d) If the drip pad is found to be leaking or unfit for use, the owner or operator shall comply with the provisions of Section 724.672(m) or close the drip pad in accordance with Section 724.674.

(Source: Added at 15 Ill. Reg. , effective)

Section 724.672 Design and operating requirements

a) Drip pads must:

1) Not be constructed of earthen materials, wood or asphalt, unless the asphalt is structurally supported;

2) Be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;

- 3) Have a curb or berm around the perimeter;
- 4) Be impermeable, e.g., concrete pads must be sealed, coated or covered with an impermeable material such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials or other wastes while being routed to an associated collection system; and
- 5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

BOARD NOTE: the Agency shall generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this subsection.

b) A drip pad must have:

- 1) A synthetic liner installed below the drip pad that is designed, constructed and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must be:
 - A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation and the stress of daily operation (including stresses from vehicular

traffic on the drip pad);

- B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and
 - C) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and
- 2) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:
- A) Constructed of materials that are:
 - i) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
 - ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and
 - B) Designed and operated to function without clogging through the scheduled closure of the drip pad; and
 - C) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.
- c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion or other deterioration that could cause hazardous waste to be released from the drip pad.
- BOARD NOTE: See subsection (m) for remedial action required if deterioration or leakage is detected.
- d) The drip pad and associated collection system must be designed and operated to convey, drain and collect liquid resulting from drippage or precipitation in order to prevent run-off.
- e) The owner or operator shall design, construct, operate and maintain a run-on control system capable of

preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system, or the drip pad is protected by a structure or cover, as described in Section 724.670(b).

- f) Unless protected by a structure or cover, as described in Section 724.670(b), the owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f). The owner or operator shall obtain a statement from an independent, qualified, registered professional engineer certifying that the drip pad design meets the requirements of this Section.
- h) Drillage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- i) The drip pad surface must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator shall document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.
- j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.
- k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drillage has ceased. The owner or operator shall maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this subsection.
- l) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise managed as soon as possible after storms to maintain design capacity of the system.

- m) Throughout the active life of the drip pad and as specified in the permit, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:
- 1) Upon detection of a condition that has led or could lead to a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator shall:
 - A) Enter a record of the discovery in the facility operating log;
 - B) Immediately remove the portion of the drip pad affected by the condition from service;
 - C) Determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
 - D) Within 24 hours after discovery of the condition, notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.
 - 2) The Agency shall: review the information submitted; make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete; and notify the owner or operator of the determination and the underlying rationale in writing.
 - 3) Upon completing all repairs and clean up, the owner or operator shall notify the Agency in writing and provide a certification, signed by an independent, qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with subsection (m)(1)(D).
- n) If a permit is necessary, the Agency shall specify in the permit all design and operating practices that are necessary to ensure that the requirements of this Section are satisfied.

- o) The owner or operator shall maintain, as part of the facility operating log, documentation of past operating and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices and a description of treated wood storage and handling practices.

(Source: Added at 15 Ill. Reg. , effective)

Section 724.673 Inspections

- a) During construction or installation, liners and cover systems (e.g., membranes, sheets or coatings) must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of Section 724.672 by an independent, qualified, registered professional engineer. The certification must be maintained at the facility as part of the facility operating record. After installation liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures or blisters.
- b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
- 1) Deterioration, malfunctions or improper operation of run-on and run-off control systems;
 - 2) The presence of leakage in and proper functioning of leak detection system.
 - 3) Deterioration or cracking of the drip pad surface.

BOARD NOTE: See Section 724.672(m) for remedial action required if deterioration or leakage is detected.

(Source: Added at 15 Ill. Reg. , effective)

Section 724.674 Closure

- a) At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.),

contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

- b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures and equipment as required in subsection (a), the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated, the operator shall close the facility and perform post-closure care in accordance with closure and post-closure care requirements that apply to landfills (Section 724.410). For permitted units, the requirement to have a permit continues throughout the post-closure period. In addition, for the purposes of closure, post closure and financial responsibility, such a drip pad is then considered to be a landfill, and the owner or operator shall meet all of the requirements for landfills specified in Subparts G and H.
- c) Existing drip pads without liners.
- 1) The owner or operator of an existing drip pad that does not comply with the liner requirements of Section 724.672(b)(1) shall:
- A) Include in the closure plan for the drip pad under Section 724.212 both a plan for complying with subsection (a) and a contingent plan for complying with subsection (b) in case not all contaminated subsoils can be practicably removed at closure; and
- B) Prepare a contingent post-closure plan under Section 724.218 for complying with subsection (b) in case not all contaminated subsoils can be practicably removed at closure.
- 2) The cost estimates calculated under Sections 724.212 and 724.244 for closure and post closure care of a drip pad subject to this subsection must include the cost of complying with the contingent closure plan and the contingent post closure plan, but are not required to include the cost of expected closure under subsection (a).

(Source: Added at 15 Ill. Reg. , effective)

Section 724.675 Design and installation of new drip pads

Owners and operators of new drip pads shall ensure that the pads are designed, installed and operated in accordance with all of the applicable requirements of Sections 724.672, 724.673 and 724.674.

(Source: Added at 15 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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725.104 Imminent Hazard Action

SUBPART B: GENERAL FACILITY STANDARDS

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AUTHORITY: Implementing Section 22.4 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch. 111-1/2, pars. 1022.4 and 1027).

SOURCE: Adopted in R81-22, 43 PCB 427, at 5 Ill. Reg. 9781, effective as noted in 35 Ill. Adm. Code 700.106; amended and codified in R81-22, 45 PCB 317, at 6 Ill. Reg. 4828, effective as noted in 35 Ill. Adm. Code 700.106; amended in R82-18, 51 PCB 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. 13489, effective August 4, 1987; amended in R87-5 at 11 Ill. Reg. 19338, effective November 10, 1987; amended in R87-26 at 12 Ill. Reg. 2485, effective January 15, 1988; amended in R87-39 at 12 Ill. Reg. 13027, effective July 29, 1988; amended in R88-16 at 13 Ill. Reg. 437, effective December 28, 1988; amended in R89-1 at 13 Ill. Reg. 18354, effective November 13, 1989; amended in R90-2 at 14 Ill. Reg. 14447, effective August 22, 1990; amended in R90-10 at 14 Ill. Reg. 16498, effective September 25, 1990; amended in R90-11 at 15 Ill. Reg. , effective ; amended in R91-1 at 15 Ill. Reg. , effective

SUBPART J: TANK SYSTEMSSection 725.290 Applicability

The regulations of this Subpart apply to owners and operators of facilities that use tank systems for storing or treating hazardous waste, except as otherwise provided in subsections (a), ~~or (b)~~ or (c), or in Section 725.101.

- a) Tank systems that are used to store or treat hazardous waste which contains no free liquids and that are

situated inside a building with an impermeable floor are exempted from the requirements in Section 725.293. To demonstrate the absence or presence of free liquids in the stored/treated waste, USEPA Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), incorporated by reference in 35 Ill. Adm. Code 720.111, must be used.

- b) Tank systems, including sumps, as defined in 35 Ill. Adm. Code 720.110, that serve as part of a secondary containment system to collect or contain releases of hazardous wastes are exempted from the requirements in Section 725.293(a).
- c) Tanks, sumps and other collection devices used in conjunction with drip pads, as defined in 35 Ill. Adm. Code 720.110 and regulated under Subpart W, must meet the requirements of this Subpart.

(Source: Amended at 15 Ill. Reg. , effective
)

SUBPART W: DRIP PADS

Section 725.540 Applicability

- a) The requirements of this Subpart apply to owners and operators of facilities that use new or existing drip pads to convey treated wood drippage to an associated collection system.
- 1) "Existing drip pads" are:
- A) Those constructed before December 6, 1990;
and
- B) Those for which the owner or operator has a design and has entered into binding financial or other agreements for construction prior to December 6, 1990.
- 2) All other drip pads are "new drip pads".
- b) The owner or operator of any drip pad that is inside or under a structure that provides protection from precipitation so that neither run-off nor run-on is generated is not subject to regulation under Section 725.543(e) or (f).

(Source: Added at 15 Ill. Reg. , effective
)

Section 725.541 Assessment of existing drip pad integrity

- a) For each existing drip pad, the owner or operator shall evaluate the drip pad and determine that it meets all of the requirements of this Subpart, except the requirements for liners and leak detection systems of Section 725.543(b). No later than June 6, 1991, the owner or operator shall obtain and keep on file at the facility a written assessment of the drip pad, reviewed and certified by an independent, qualified registered professional engineer that attests to the results of the evaluation. The assessment must be reviewed, updated and re-certified annually until all upgrades, repairs or modifications necessary to achieve compliance with all of the standards of Section 725.543 are complete. The evaluation must justify and document the extent to which the drip pad meets each of the design and operating standards of Section 725.543, except the standards for liners and leak detection systems, specified in Section 725.543(b), and must document the age of the drip pad to the extent possible, to document compliance with subsection (b).
- b) The owner or operator shall develop a written plan for upgrading, repairing and modifying the drip pad to meet the requirements of Section 725.543(b) and submit the plan to the Agency no later than 2 years before the date that all repairs, upgrades and modifications will be complete. This written plan must describe all changes to be made to the drip pad in sufficient detail to document compliance with all the requirements of Section 725.543 and must document the age of the drip pad to the extent possible. The plan must be reviewed and certified by an independent qualified, registered professional engineer. All upgrades, repairs and modifications must be completed in accordance with the following:
- 1) For existing drip pads of known and documentable age, all upgrades, repairs and modifications must be completed by June 6, 1993, or when the drip pad has reached 15 years of age, whichever comes later.
 - 2) For existing drip pads for which the age cannot be documented, by June 6, 1999; but, if the age of the facility is greater than 7 years, all upgrades, repairs and modifications must be completed by the time the facility reaches 15 years of age or by June 6, 1993, whichever comes later.

- 3) The owner or operator may petition the Board for an extension of the deadline in subsection (b)(1) or (2).
 - A) The owner or operator shall file a petition for a RCRA variance as specified in 35 Ill. Adm. Code 104.
 - B) The Board will grant the petition for extension if it finds that:
 - i) The drip pad meets all of the requirements of Section 725.543, except those for liners and leak detection systems specified in Section 725.543(b); and
 - ii) That it will continue to be protective of human health and the environment.
- c) Upon completion of all repairs and modifications, the owner or operator shall submit to the Agency, the as-built drawings for the drip pad, together with a certification by an independent, qualified, registered professional engineer attesting that the drip pad conforms to the drawings.
- d) If the drip pad is found to be leaking or unfit for use, the owner or operator shall comply with the provisions of Section 725.543(m) or close the drip pad in accordance with Section 725.545.

(Source: Added at 15 Ill. Reg. , effective)

Section 725.542 Design and installation of new drip pads

Owners and operators of new drip pads shall ensure that the pads are designed, installed and operated in accordance with all of the applicable requirements of Sections 725.543, 725.544 and 725.545.

(Source: Added at 15 Ill. Reg. , effective)

Section 725.543 Design and operating requirements

- a) Drip pads must:
 - 1) Not be constructed of earthen materials, wood or asphalt, unless the asphalt is structurally

supported;

- 2) Be sloped to free-drain to the associated collection system treated wood drippage, rain, other waters, or solutions of drippage and water or other wastes;
- 3) Have a curb or berm around the perimeter;
- 4) Be impermeable, e.g., concrete pads must be sealed, coated or covered with an impermeable material such that the entire surface where drippage occurs or may run across is capable of containing such drippage and mixtures of drippage and precipitation, materials or other wastes while being routed to an associated collection system; and
- 5) Be of sufficient structural strength and thickness to prevent failure due to physical contact, climatic conditions, the stress of installation and the stress of daily operations, e.g., variable and moving loads such as vehicle traffic, movement of wood, etc.

BOARD NOTE: the Agency shall generally consider applicable standards established by professional organizations generally recognized by the industry such as the American Concrete Institute (ACI) or the American Society of Testing Materials (ASTM) in judging the structural integrity requirement of this subsection.

b) A new drip pad or an existing drip pad, after the deadline established in Section 725.541(b), must have:

- 1) A synthetic liner installed below the drip pad that is designed, constructed and installed to prevent leakage from the drip pad into the adjacent subsurface soil or groundwater or surface water at any time during the active life (including the closure period) of the drip pad. The liner must be constructed of materials that will prevent waste from being absorbed into the liner and to prevent releases into the adjacent subsurface soil or groundwater or surface water during the active life of the facility. The liner must be:
 - A) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent

failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or drip pad leakage to which they are exposed, climatic conditions, the stress of installation and the stress of daily operation (including stresses from vehicular traffic on the drip pad);

- B) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression or uplift; and
- C) Installed to cover all surrounding earth that could come in contact with the waste or leakage; and

2) A leakage detection system immediately above the liner that is designed, constructed, maintained and operated to detect leakage from the drip pad. The leakage detection system must be:

A) Constructed of materials that are:

- i) Chemically resistant to the waste managed in the drip pad and the leakage that might be generated; and
- ii) Of sufficient strength and thickness to prevent collapse under the pressures exerted by overlaying materials and by any equipment used at the drip pad; and

B) Designed so that it will detect the failure of the drip pad or the presence of a release of hazardous waste or accumulated liquid at the earliest practicable time.

c) Drip pads must be maintained such that they remain free of cracks, gaps, corrosion or other deterioration that could cause hazardous waste to be released from the drip pad.

BOARD NOTE: See subsection (m) for remedial action required if deterioration or leakage is detected.

d) The drip pad and associated collection system must be designed and operated to convey, drain and collect liquid resulting from drippage or precipitation in order to prevent run-off.

- e) The owner or operator shall design, construct, operate and maintain a run-on control system capable of preventing flow onto the drip pad during peak discharge from at least a 24-hour, 25-year storm, unless the system has sufficient excess capacity to contain any run-on that might enter the system, or the drip pad is protected by a structure or cover, as described in Section 725.540(b).
- f) Unless protected by a structure or cover, as described in Section 725.540(b), the owner or operator shall design, construct, operate and maintain a run-off management system to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
- g) The drip pad must be evaluated to determine that it meets the requirements of subsections (a) through (f). The owner or operator shall obtain a statement from an independent, qualified, registered professional engineer certifying that the drip pad design meets the requirements of this Section.
- h) Drippage and accumulated precipitation must be removed from the associated collection system as necessary to prevent overflow onto the drip pad.
- i) The drip pad surface must be cleaned thoroughly at least once every seven days such that accumulated residues of hazardous waste or other materials are removed, using an appropriate and effective cleaning technique, including but not limited to, rinsing, washing with detergents or other appropriate solvents, or steam cleaning. The owner or operator shall document the date and time of each cleaning and the cleaning procedure used in the facility's operating log.
- j) Drip pads must be operated and maintained in a manner to minimize tracking of hazardous waste or hazardous waste constituents off the drip pad as a result of activities by personnel or equipment.
- k) After being removed from the treatment vessel, treated wood from pressure and non-pressure processes must be held on the drip pad until drippage has ceased. The owner or operator shall maintain records sufficient to document that all treated wood is held on the pad following treatment in accordance with this subsection.
- l) Collection and holding units associated with run-on and run-off control systems must be emptied or otherwise

managed as soon as possible after storms to maintain design capacity of the system.

- m) Throughout the active life of the drip pad, if the owner or operator detects a condition that could lead to or has caused a release of hazardous waste, the condition must be repaired within a reasonably prompt period of time following discovery, in accordance with the following procedures:
- 1) Upon detection of a condition that has led or could lead to a release of hazardous waste (e.g., upon detection of leakage in the leak detection system), the owner or operator shall:
 - A) Enter a record of the discovery in the facility operating log;
 - B) Immediately remove the portion of the drip pad affected by the condition from service;
 - C) Determine what steps must be taken to repair the drip pad, clean up any leakage from below the drip pad, and establish a schedule for accomplishing the clean up and repairs;
 - D) Within 24 hours after discovery of the condition, notify the Agency of the condition and, within 10 working days, provide written notice to the Agency with a description of the steps that will be taken to repair the drip pad and clean up any leakage, and the schedule for accomplishing this work.
 - 2) The Agency shall: review the information submitted; make a determination regarding whether the pad must be removed from service completely or partially until repairs and clean up are complete; and notify the owner or operator of the determination and the underlying rationale in writing.
 - 3) Upon completing all repairs and clean up, the owner or operator shall notify the Agency in writing and provide a certification, signed by an independent, qualified, registered professional engineer, that the repairs and clean up have been completed according to the written plan submitted in accordance with subsection (m)(1)(D).
- n) The owner or operator shall maintain, as part of the facility operating log, documentation of past operating

and waste handling practices. This must include identification of preservative formulations used in the past, a description of drippage management practices and a description of treated wood storage and handling practices.

(Source: Added at 15 Ill. Reg. , effective)

Section 725.544 Inspections

- a) During construction or installation, liners and cover systems (e.g., membranes, sheets or coatings) must be inspected for uniformity, damage and imperfections (e.g., holes, cracks, thin spots or foreign materials). Immediately after construction or installation, liners must be inspected and certified as meeting the requirements of Section 725.543 by an independent, qualified, registered professional engineer. The certification must be maintained at the facility as part of the facility operating record. After installation liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures or blisters.
- b) While a drip pad is in operation, it must be inspected weekly and after storms to detect evidence of any of the following:
- 1) Deterioration, malfunctions or improper operation of run-on and run-off control systems;
 - 2) The presence of leakage in and proper functioning of leak detection system.
 - 3) Deterioration or cracking of the drip pad surface.

BOARD NOTE: See Section 725.543(m) for remedial action required if deterioration or leakage is detected.

(Source: Added at 15 Ill. Reg. , effective)

Section 725.545 Closure

- a) At closure, the owner or operator shall remove or decontaminate all waste residues, contaminated containment system components (pad, liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leakage, and manage them as hazardous waste.

- b) If, after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures and equipment as required in subsection (a), the owner or operator finds that not all contaminated subsoils can be practically removed or decontaminated, The operator shall close the facility and perform post-closure care in accordance with closure and post closure care requirements that apply to landfills (Section 725.410). For permitted units, the requirement to have a permit continues throughout the post- closure period.
- c) Existing drip pads without liners.
- 1) The owner or operator of an existing drip pad that does not comply with the liner requirements of Section 725.543(b)(1) shall:
- A) Include in the closure plan for the drip pad under Section 725.212 both a plan for complying with subsection (a) and a contingent plan for complying with subsection (b) in case not all contaminated subsoils can be practicably removed at closure; and
- B) Prepare a contingent post-closure plan under Section 725.218 for complying with subsection (b) in case not all contaminated subsoils can be practicably removed at closure.
- 2) The cost estimates calculated under Sections 725.212 and 725.244 for closure and post closure care of a drip pad subject to this subsection must include the cost of complying with the contingent closure plan and the contingent post closure plan, but are not required to include the cost of expected closure under subsection (a).

(Source: Added at 15 Ill. Reg. , effective)