## ILLINOIS POLLUTION CONTROL BOARD March 18, 1983

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PHA	SE ]	II	RCRA	RULES		)	

PROPOSED RULE. FIRST NOTICE

PROPOSED OPINION OF THE BOARD (by D. Anderson):

On August 18, 1982 the Board opened this docket for the purpose of promulgation of Phase II RCRA regulations in response to the United States Environmental Protection Agency's (USEPA's) promulgation of interim final rules allowing permit applications for new and existing hazardous waste management (HWM) facilities (47 FR 32,369, July 26, 1983). These rules became effective on January 26, 1983. Section 22.4(a) of the Environmental Protection Act (Act) requires the Board to adopt within 180 days regulations or amendments thereto promulgated by USEPA pursuant to Sections 3001 through 3005 of the Resource Conservation and Recovery Act (RCRA).

The Board previously adopted regulations allowing Illinois to receive Phase I interim authorization (R81-22, Opinion and Order of February 4, 1982; 6 Ill. Reg. 4828). Authorization was received on May 17, 1982 (47 Fed. Reg. 21,043). The Phase I rules have recently been amended to reflect amendments to the corresponding federal rules (R82-18, Order of January 13, 1983).

In a related action the Board adopted regulations to allow Illinois to receive authorization for an underground injection control (UIC) program (R81-32, Opinion and Order, May 13, 1982; 6 Ill. Reg. 12,479, October 15, 1982). Authorization for this program has not yet been received.

In summary, this action will involve adoption of a RCRA permit program and standards for HWM facilities and several types of treatment, storage and disposal (TSD) unit. The permit program proposal consists of new Part 703, and amendments to Parts 702 and 705, which were previously adopted with the UIC package. Parts 702, 703 and 705 correspond to 40 CFR 122, Subparts A and B, and 40 CFR 124. The operating standards proposal consists of new Part 724, which corresponds to 40 CFR 264. There will also be miscellaneous amendments to other Parts so that the entire RCRA/UIC package is up to date and consistent.

## Federal Regulations

The proposal is current with federal regulations appearing in the Federal Register on or before October 29, 1982. The following amendments have been incorporated:

35 Ill. Adm. Code	47 Fed. Reg.
Part 702 (November 23, 1981 through October 29, 1982)	4996 15,306 27,533 32,369 41,563
Part 703 (1982 CFR plus July 1 through October 29, 1982)	32,369 32,372
Part 705 (No changes resulting from federal amendments)	
Part 724 (1982 CFR plus July 1 through October 29, 1982)	28,267 28,627 30,446 32,349 44,738 46,277

In order to bring the rest of the RCRA/UIC package up to date, it will be necessary to propose miscellaneous amendments to Parts 700, 704, 720, 721, 722, 723, 725 and 730. These will be proposed after the main package in order to even out the typing load. These will appear at a later date in the Illinois Register, but soon enough to allow comment prior to adoption of the Phase II rules.

## Overview of the RCRA Program

Part 703 contains the RCRA permit requirement. Together with Parts 702 and 705 it provides for applications, public participation and permit issuance. Generally, existing facilities obtained interim status by filing a Part A application. The Agency will call in Part B applications in order to initiate actual permit issuance. New facilities will be required to file both Part A and Part B of the application. The Agency will review permit applications against the operating standards of Part 724.

The Part 724 standards consist of two broad divisions:

 Subparts A-H contain rules generally applicable to all HWM facilities; 2. Subparts I-O modify and supplement these rules as applied to specific types of TSD units.

The regulated TSD units fall into seven categories:

- 1. Containers (storage);
- 2. Tanks (storage and treatment);
- 3. Surface impoundments (storage and treatment);
- 4. Waste piles (storage);
- 5. Land treatment (sludge application);
- 6. Landfills (disposal, including surface impoundments and waste piles used for disposal);
- 7. Incinerators (treatment).

# Exemptions from Part 724

Among the exemptions are the following:

- 1. Underground injection [§724.101(d)];
- 2. Publicly owned treatment works [§724.101(e)];
- 3. Small quantities [§724.101(g)(1)];
- 4. Farmers [§724.101(g)(4)];
- 5. Totally enclosed treatment facilities, elementary neutralization units and indoor wastepiles [§724.101(g)(5) and (6); §724.290];
- 6. Addition of absorbent materials [§724.101(q)(10)];

# Requirements Common to All HWM

The following requirements are common to all HWM facilities:

- 1. USEPA ID number (§724.111);
- 2. Security: surveillance, fence and signs (§724.114);
- Personnel training program, job descriptions and titles (§724.116);
- 4. Outside 100 year flood plain [§724.118(b)];

- 5. Internal and external communications, fire extinguishers and water or foam (§724.132);
- 6. Aisle space for emergency equipment (§724.135);
- 7. Arrangements with local emergency units (§724.137);
- Contingency plan describing the action of personnel in certain emergencies (§724.152);
- 9. A designated emergency coordinator (§724.155);
- 10. Manifest system (§724.171);
- 11. Operating record (§724.173);
- 12. Annual reports (§724.177);
- 13. Financial responsibility (§724.240).

## Financial Requirements

There are three types of financial requirements:

- 1. Financial assurance for closure (§724.243);
- 2. Financial assurance for post-closure care (§724.245);
- 3. Liability for sudden and non-sudden accidental occurrences (§724.247).

Financial assurance for closure and post-closure care may be conveniently discussed together, since a single mechanism may be used (§724.246). All HWM operators must give closure assurance, but only operators of disposal units must give postclosure care assurance. Disposal units include landfills, and piles and impoundments when it appears that it will not be possible to remove all waste residues on closure (§724.240).

The closure rules begin with an estimate of closure cost "at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan" (§724.243). This must be revised by the operator annually and whenever a change in the closure plan increases the cost of closure. Note that closure could range from removal of a few barrels at a container storage area to closure of a hazardous waste landfill costing millions of dollars.

Facilities with disposal units must estimate the postclosure cost, which is, in current dollars, the annual post-closure cost estimate times the number of years postclosure care will be required (§724.444). It must be changed annually or when the post-closure plan is changed. Postclosure care involves, for example, maintenance of cover and continued groundwater monitoring.

The operator is required to give financial assurance in an amount equal to the closure cost estimate and, for disposal units, the post-closure cost estimate. This may be done through a combination of the following mechanisms:

- 1. A trust fund [§§724.243(a) and 724.245(a)];
- 2. Surety bond guaranteeing payment into trust fund [§§724.243(b) and 724.245(b)];
- Surety bond guaranteeing performance or payment into trust fund [§§724.243(c) and 724.245(c)];
- 4. Letter of credit which will obligate a financial institution to fund a trust [§§724.243(d) and 724.245(d)];
- 5. Insurance obligating the insurer to pay closure or post-closure care costs at the direction of the Agency [§§724.243(e) and 724.245(e)];
- 6. Self-insurance by an operator or by its parent corporation which meets a financial test [§§724.243(f) and 724.245(f)].

The first four work together: the operator could set up a trust fund and pay part of the closure and post-closure cost into the trust. The rest of the financial assurance could be given by a combination of bonds and letters of credit payable to the trust. Part of the assurance could also be given with insurance, which does not involve a trust fund.

In addition to the federal mechanisms, the Board has proposed to allow an alternative state-required mechanism for closure, but not post-closure, assurance: the operator may give a bond without surety secured by a certificate of deposit or a State of Illinois bond in an amount equal to the closure cost estimate [§724.243(j)]. This will work like method (1) with the State acting as the trustee holding property equal to the closure cost estimate. The intention is to allow small operators to avoid the costs associated with profits to private trustees, sureties and insurance companies. For a small business with a hazardous waste storage area, the annual administrative costs could easily exceed the closure cost. The financial assurance regulations function through permit modifications which affect the amount or type of assurance which must be given. Disputes could arise between the permittee and the Agency if the Agency modified the permit to increase the cost estimate, if the permittee requested a decrease in the estimate, if the Agency decided the operator or parent corporation no longer met a financial test or if the Agency deemed the facility abandoned or otherwise modified the permit to require closure to begin. Section 724.243(j) deems these events to be permit denials allowing appeal to the Board. See also §724.245(k).

Section 724.247(a) requires the operator to maintain insurance for sudden accidental occurrences in the amount of at least \$1 million per occurrence with an annual aggregate of \$2 million. Section 724.247(b) requires at least \$3 million for non-sudden occurrences, with an annual aggregate of \$6 million. Sections 724.247(c) and (d) allow the level of required liability to be adjusted up or down at the instance of the Agency or the operator. Section 724.247(f) allows self insurance under conditions similar to closure assurance.

Rather than set forth the form of instruments in detail, the Board has incorporated 40 CFR 264.151 by reference. The Agency will promulgate standardized forms, based on the federal rules modified to reflect Illinois law.

Changes in the amount or type of financial assurance or liability insurance are permit modifications which must proceed by way of the Part 705 procedures and may be appealed to the Board.

#### Requirements Not Common to All HWM Facilities

Some requirements vary depending on the type of HWM facility. These include the following, which will be discussed at greater length below:

- 1. Inspections;
- 2. Waste Analysis;
- Special requirements for ignitable, reactive or incompatible waste;
- 4. Design standards (other than groundwater protection);
- Groundwater protection: liner design, leak detection and monitoring;
- 6. Closure and Post-closure;

7. Exemptions from groundwater protection and final cover requirements.

#### Inspection

The general inspection requirements require a written schedule for inspection of monitoring, emergency, operating and structural equipment and security devices [§724.115(b)]. The operator must follow the schedule and maintain a log [§§724.115(a) and (6)]. Specific schedules and types of inspection are specified for the various types of TSD unit.

Inspections include both routine operating inspections and inspections during construction or repair. "Inspections" are carried out by the operator, not the Agency. This is also sometimes referred to as "monitoring", to be distinguished from "groundwater monitoring", which is a separate topic. This use of the terms "inspection" and "monitoring" differs from the usual meaning in Board rules.

Examples of operating inspection requirements include:

- 1. Tanks: Daily inspection of overfilling equipment, pressure and temperature guages and actual liquid level; weekly inspection for corrosion, wet spots and dead vegetation; complete inspection as scheduled by permit condition (§724.294).
- 2. Surface impoundments: Weekly inspection, and after storms, of overtopping controls, for sudden drops in level, for liquids in any leak detection system and for erosion. Structural integrity must be certified by an engineer if an impoundment has been out of service for more than six months [§724.326(b)].
- 3. Piles: Weekly inspections, and after storms, of run-on/run-off and wind dispersal controls, and for liquids in any leak detection system or leachate collection system [§724.354(b)].
- 4. Land treatment: Weekly inspections, and after storms, of run-on/run-off and wind dispersal controls and for liquids in any leak detection or leachate collection system [§724.403(b)].
- 6. Incinerators: Continuous monitoring of combustion temperature, waste feed rate, "indicator combustion gas velocity" and carbon monoxide; daily inspections for spills and leaks; weekly testing of alarms and emergency waste feed cutoff (§724.447).

During construction, liners must be inspected for uniformity, damage and imperfections. Soil-based liners must be inspected for lenses, root holes, etc. Synthetic liners must be inspected for tight joints and the absence of tears [§§724.326(a), 724.354(a) and 724.403(a)].

# Waste Analysis

The operator must obtain a detailed physical and chemical analysis of any hazardous waste before he treats, stores or disposes of it [§724.113(a)]. This must be repeated as necessary to ensure that it is accurate and up to date [§724.113(a) (3)]. The facility permit requires a waste analysis plan specifying the types of tests, sampling methods and frequencies at which the initial analysis will be reviewed [§724.113(b)]. For off-site facilities, the waste analysis plan must also specify procedures used to inspect incoming loads to ensure that they match the identity of the waste on the manifest [§724.113(c)]. This does not necessarily require a chemical analysis of each load, unless the plan calls for such [§724.113(c)[2]].

The waste analysis rules depart from the norm only with respect to incinerators (§724.441). Permit applications require more detailed information on waste feed, including the heat value, viscosity and Appendix VIII hazardous constituents (35 III. Adm. Code 703.223 and 703.224). Throughout operation the operator must conduct sufficient analyses to confirm that the waste feed is within the physical and chemical composition limits specified in the permit [§724.441(b)].

# Ignitable and Reactive Waste

General requirements for ignitable, reactive and incompatible waste include the following:

- Protection from sources of ignition, "No Smoking" signs and all smoking and flames confined to specifically designated locations;
- 2. Precautions for extreme heat or pressure, toxic gases and damage to structural integrity;
- 3. Documentation from literature search must be included with the permit application (§724.117).

Additional specific requirements for types of TSD unit include the following:

1. Tanks: Protection of construction material from wastes which are incompatible with construction

materials [§724.292(a)]; washing between incompatible wastes (§724.299); exemption where wastes are treated so as to no longer be reactive or ignitable immediately after entry into tank [§724.298(a)(1)(A)]; buffer zone requirements [§724.298(b)]; exemption for tanks to be used for emergency storage, as for example a waste feed diversion from an incinerator [§724.298 (a)(3)].

- 2. Impoundments: Authorization for treatment in impoundment immediately after placement and for emergency use (§724.329).
- 3. Piles: Separation from other wastes by berm or wall; cleaning of base between incompatible wastes (§724.357).
- 4. Land Treatment: Authorization if waste is immediately incorporated into the soil so it is no longer ignitable or reactive (§724.381).
- 5. Landfills: Ignitable wastes may be landfilled in containers if usual precautions are followed; reactive waste is prohibited unless it is treated in place so it is no longer reactive immediately after placement.
- 6. Incinerators: No special requirements.

#### Design and Operating Standards Other Than Groundwater Protection

The design standards center on different factors depending on the type of TSD unit. The design and operating rules closely related to groundwater protection are discussed in the sections which follow. The following are design and operating rules which are not closely related to groundwater protection:

- Tanks: foundation shell strength, pressure control, corrosion, over-filling controls and freeboard (§724.291).
- Surface impoundments (storage): freeboard and dike integrity to prevent massive failure without relying on liner systems [\$724.321(d)].
- Waste piles (storage): Wind dispersal controls [§724.351(f)].
- 4. Land treatment: the design is left pretty much open, but the operator must make a "treatment demonstration" showing that hazardous constituents can be "completely degraded, transformed or immobilized in the treatment

zone" [§724.371(b)]. There are limitations on the growth of food chain crops and the rate of application of cadmium (§724.376).

- 5. Landfills: wind dispersal controls (§724.401).
- 6. Incinerators: Performance is evaluated by selected "principal organic hazardous constituents" (POHCs) (§724.442). Incinerator must achieve 99.99% destruction and removal of POHCs. Particulate standard is 180 mg/dscm (§724.443). Fugitive emissions must be controlled (§724.445).

### Groundwater Protection Program

The "groundwater monitoring and response program" has three stages (§724.191):

- 1. Detection monitoring program;
- 2. Compliance monitoring program;
- 3. Corrective action program.

In the facility permit the Agency specifies which programs apply [§724.191(b)]. For a new facility this should be a detection monitoring program. If leaks are detected during operation, the permit should be amended to require a compliance monitoring and/or corrective action program, as will be discussed in greater detail below.

The general groundwater monitoring program, applicable to all three stages, includes the following, as specified in the facility permit:

- 1. A sufficient number of wells, at appropriate depths and locations, to represent background water quality and the water quality at the downgradient "point of compliance" specified in the facility permit [§§724.195 and 724.197(a)];
- Determination of groundwater surface elevation [§724.197(f)];
- 3. Establishment of background levels [§724.197(g)];
- Sampling, analytical and statistical procedures [§724.197(d) and (h)].

#### Detection Monitoring Program

The first stage of the groundwater monitoring and response program is the "detection monitoring program" (§724.198). This applies to everybody subject to the groundwater monitoring requirements who is not in the compliance monitoring or corrective action programs (§724.191). Some existing facilities may initially be permitted with compliance monitoring or corrective action programs. The limitations on applicability of the groundwater protection rules are discussed below.

An operator subject to detection monitoring must monitor for "indicator parameters", specified in the facility permit, which will "provide a reliable indication of the presence of hazardous constituents in groundwater" [§724.198(a)]. The operator must determine groundwater quality at each monitoring well at least twice each year, and the groundwater flow rate and direction annually [§724.198(d) and (e)].

If the detection monitoring program reveals a "statistically significant increase" over background levels for the indicator parameters specified in the permit, the operator must:

- 1. Notify the Agency [§724.198(h) and (i)];
- 2. Undertake additional sampling to establish background levels for "Appendix VIII hazardous constituents" (see 40 CFR 261) [§724.198(h)(1) and (2)];
- 3. Within 90 days, submit a permit application for a compliance monitoring program [§724.198(h)(4)];
- 4. Within 180 days, submit an engineering feasibility study for a corrective action program [§724.198(h)(5)].

The operator has two options which do not delay the time limits for permit modification applications. To avoid the compliance monitoring and corrective action programs, the operator may:

- 1. Demonstrate that a source other than a regulated unit caused the increase [§724.198(i)]; or
- 2. Demonstrate an error in sampling, analysis or evaluation.

#### Compliance Monitoring Program

The "compliance monitoring program" involves a permit modification which establishes a "groundwater protection standard" in permits "when hazardous constituents have entered the groundwater from a regulated unit" (§§724.192 and 724.199). Establishment of the "groundwater protection standard" proceeds by four steps:

- 1. Specification of "hazardous constituents", from 40 CFR 261, Appendix VIII, which have been detected in the uppermost aquifer and which are reasonably expected to be in or derived from the unit, subject to a demonstration by the operator "that the constituent is not capable of posing a present or potential hazard to human health or the environment" (§724.193).
- 2. Specification in the permit of a "concentration limit" equal to (§724.194):
  - A. The background level at the time the hazardous constituent is first specified in the permit;
  - B. For certain constituents (7 metals, selenium and 6 pesticides), a limit specified by rule, unless the background is already over the limit; or
  - C. An alternate limit established by the Agency.
- 3. A "point of compliance" at the downgradient limit of the unit or "area" (§724.195). (This is specified in the detection monitoring program also.)
- 4. A "compliance period", extending from the time of establishment of the standard for a period of time equal to the active life of the facility (including time prior to permitting) plus the closure period, subject to extension if the operator is still in corrective action at the end (§724.196).

As an example of the "compliance period", consider a landfill opened in 1970 and closed in 1983, with hazardous constituents first detected in groundwater in 1985. The compliance period will be 1985 through 1998, subject to extension if the facility is still in corrective action in 1998. This is based on the assumptions: that hazardous constituents first crossed the liner when the unit was opened in 1970; that it took 15 years to reach groundwater; and, that the liner stopped leaking when the landfill was closed 13 years later. Thus a 13-year plume is moving into the groundwater, reaching groundwater between 1985 and 1998. The "compliance monitoring program" is a permit modification which requires the operator to monitor groundwater to determine whether regulated units are in compliance with the groundwater protection standard [§724.199(a)]. If the operator determines that the groundwater protection standard is being exceeded at any regulated unit, he must notify the Agency and submit a permit modification application for a "corrective action program", subject to the possibility of showing a sampling error or other source of the increase, or asking for an alternative standard [§724.199(i) and (j)].

#### Corrective Action Program

The "corrective action program" is a permit modification which requires the operator to prevent hazardous constituents from exceeding the concentration limits specified in the permit "by removing the hazardous waste constituents or treating them in place" [§724.200(b) and (e)]. A groundwater monitoring program is established "to demonstrate the effectiveness of the corrective action program" [§724.200(d)]. Corrective action continues until the end of the compliance period, and beyond that until the groundwater protection standard has not been exceeded for three consecutive years [§724.200(f)].

## Closure and Post-closure

The operator must close the facility so as to minimize the need for further maintenance and to minimize the escape of hazardous constituents (§724.211). A closure plan must be submitted with the permit application (§724.212). The operator must "treat, remove or dispose of" all hazardous wastes within 90 days after receiving the final volume of waste, and complete closure within 180 days (§724.213). When closure is complete, the operator's engineer certifies to the Agency that the closure plan has been executed (§724.215).

Disposal facilities (landfills, and piles or impoundments from which waste cannot be removed at closure) must have a post-closure plan. Post-closure care continues for 30 years, with possible reduction or extension (§724.217). Monitoring and maintenance continues. Post-closure use must not disturb the integrity of the final cover [§724.217(c)]. A disposal facility must file a plat and put a notice in its chain of title (§724.219).

The details of closure are spelled out for the different types of TSD unit . The operator must cover a landfill so as to [§724.210(a)]:

1. Function with minimum maintenance;

- 2. promote drainage and minimize cover erosion;
- 3. Accommodate subsidence; and
- 4. "Have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present".

During the post-closure period the operator must (§724.210):

- 1. Maintain integrity of final cover;
- 2. Maintain and monitor any leak detection system;
- 3. Operate the leachate collection system;
- 4. Maintain and monitor groundwater monitoring system;
- 5. Prevent run-on/run-off damage;
- 6. Protect and maintain surveyed benchmarks.

For TSD units other than landfills the idea is to avoid the final cover and post-closure provisions. For example, for an impoundment, the operator is supposed to remove or decontaminate all "waste residues" on closure [§724.328(a)]. If this is not possible, it is closed like a landfill [§724.328(b)].

# Groundwater Protection and Post-Closure Care--Exemptions

For landfills, groundwater protection dominates the design and operating requirements. The same is true for piles and impoundments, because of their potential to become disposal units. However, treatment and storage units escape the more rigorous groundwater protection and post-closure care requirements:

- 1. Containers: A base with containment and collection system for spills and leaks; removal of all hazardous waste and contaminated containers on closure (§724.275 and §724.278).
- Tanks: All must have inner liners and weekly inspections, with removal of all hazardous waste on closure (§724.297).
- 3. Land treatment: Operator must conduct "unsaturated zone monitoring", about 5 feet under the surface, for principal hazardous constituents (PHCs) (§724.278). Operator is generally exempt from groundwater monitoring and full closure requirements if no PHCs show up in the unsaturated zone.

4. Incinerators: Operator must remove hazardous waste on closure.

Landfill Grandwater Protection Design

The basic landfill design requires:

- A liner "constructed of materials that prevent wastes from passing into the liner during the active life of the facility" [§724.401(a)].
- A leachate collection and removal system [§724.401
  (a)(2)].
- 3. Run-on controls designed for the peak of a 25-year storm [§724.401(a)].
- Run-off controls to collect and control a 24-hour, 25-year storm [§724.401(d)].
- 5. Groundwater monitoring (§724.190).

There are two ways around this. The first allows the Agency to exempt the facility from the liner and leachate collection provisions if the operator demonstrates that alternative design and operating practices and location characteristics "will prevent the migration of any hazardous constituents to groundwater or surface water at any future time" [§724.401(b)].

The second way gets the operator around the groundwater monitoring provisions. The basic thrust of the regulatory program is to get everybody to design new landfills with a double liner and leak detection system as follows. These landfills must:

- Be entirely above the seasonal high water table [§724.402(a)(1)];
- Have two liners designed so as "to prevent the migration of liquids into or out of the space between the liners" [§702.402(a)(2)];
- Have a leak detection system in the space between [§702.402(a)(3)];
- 4. Have leachate collection and removal from above the top liner [§724.402(a)(4)], and have run-on/run-off controls [§724.401(d) and (e)], as with all landfills.

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## Surface Impoundment Groundwater Protection Design

Liner requirements for impoundments are similar to those for landfills: a liner with run-on/run-off controls, but no leachate collection. The impoundment must have a liner which will prevent migration of wastes into the liner during the active life [§724.321(a)]. On closure all "waste residues", including any contaminated liner, must be removed [§724.328(a)]. If not, the remaining wastes (not necessarily hazardous) must be dewatered and covered like a hazardous waste landfill [§724.328(a)(2)].

The operator can be exempted from the liner requirement on a showing that alternatives will prevent migration at any time in the future [§724.321(b)].

The operator can be exempted from the groundwater monitoring requirement by use of a double liner with leak detection system (§724.322).

# Waste Pile Groundwater Protection Design

The basic design for a waste storage pile is a liner, a leachate collection system and run-on/run-off controls [§724.351(a)]. Liner design includes foundation requirements [§724.351(a)(1)(ii)]. Leachate may not be allowed to exceed one foot in depth inside the pile [§724.351(a)(2)]. Waste may be allowed to migrate into the liner [§724.351(a)(1)], but the liner would have to be removed on closure, or remaining wastes would have to be covered like a landfill (§724.358).

Piles which are inside a building and protected from precipitation are exempt if no free liquids are placed in the pile, and there is run-on protection and no reactions producing leachate (§724.350).

Piles may be exempted from the liner and leachate collection provisions if the operator demonstrates no migration at 'any time in the future [§724.351(b)].

Piles may also be exempted from groundwater monitoring if there is a double liner with leachate detection between and collection and removal from above the top liner (§724.352).

There is an exemption from groundwater protection unique to piles if the waste is periodically removed so the liner can be inspected. Such a pile must have a single liner and a leachate removal system (§724.353).

#### Summary of Major Issues

The Board is directed to adopt a regulatory program which is "identical in substance" with the federal. Part of the Board's job is to review the federal rules to make such changes as are necessary to make the program consistent with Illinois law. In this Proposed Opinion, the Board will solicit comments on what it perceives at this time to be major issues. The public is invited to comment on these, as well as the text of the rules and such issues as they perceive.

- I. Permit Modifications:
  - A. Should the Agency be able to extend the time for Part A via a "compliance order"? Should this be allowed only via a variance? [§§703.150(c) and 703.157(b); 40 CFR 122.22(a)(3) and 122.23(e)(2)]
  - B. Groundwater Protection: Should the Agency be able to impose compliance monitoring and corrective action via permit modification rather than an enforcement action after contaminants are detected in groundwater [§724.198(h)]?
  - C. Financial Responsibility: Should the Agency be able to change financial responsibility requirements without an enforcement action?
    - 1. Should a surety become liable only when the Board orders closure to begin [§§724.243(b)(4)(B) and 724.243(c)(5)]?
    - 2. May the Agency draw on a letter of credit without a Board or Court order [§724.243(d)(8)]?
    - 3. Should the Agency be able to get to financial resources without a Board Order if the operator fails to pay an insurance premium [§724.243(e)(6)]?
    - 4. Does the Agency have authority to "deem a facility abandoned", triggering financial mechanisms, without a Board Order?
    - 5. Can the Agency require alternate financial assurance based on its own information of insolvency without a Board Order [§724.243 (f) (7) and (8)]?
    - 6. Would stays during appeals of permit modifications related to increases in financial assurance frustrate the purpose of providing funds for closure before environmental damage can be done [§724.243(j)

- D. Liability Insurance: Can the Agency increase the amount of required insurance based on its own information without a Board Order [§724.243(e)(8)(A)]?
- E. POHC Removal: Failure to obtain through incineration 99.99% destruction removal efficiency of principal organic hazardous constituents is not grounds for an enforcement action, but is grounds for permit modification. Is this consistent with public enforcement under the Illinois Act? Can the Agency force a permit modification without a Board Order [§724.443(d)]?
- II. Rulemaking:
  - A. Groundwater Protection
    - 1. Does the Agency have authority to set in permits groundwater concentration limits other than those specified by Board rule [§§724.193 and 724.194(a)]?
    - 2. Can the Agency grant exemptions or alternate concentration limits that depart from the concentration limits set by Board rule [§§724.193 and 724.194(b)]?
  - B. Post-closure Period: Can the Agency reduce or extend the 30-year post-closure care period [§724.217(a)(2)]?
- III. Agency Variances:
  - A. Should schedules of compliance to achieve full compliance with Part 724 standards be allowed in permits only pursuant to Board variance [§§702.110 and 702.162]?
  - B. Should schedules of compliance for floodproofing require a variance from §724.118(b)? Would these need IDOT approval [§703.184(e)]?
  - C. Groundwater Protection: Should the alternate concentration limits and exemptions be allowed without a variance or site specific [§§724.193, 724.194 and 724.198(h)]?
  - D. Closure: Can the Agency approve disturbance after closure by way of permit modification? What if the facility permit has been terminated [§724.217(c)]? Would this require a variance from §21(n) and §39(g) of the Act?
  - E. Liability Insurance: Do permit modifications reducing the required amount of liability insurance amount to variances from Board rules [§§703.183(q) and 724.247(c)]?

- F. Land Treatment Demonstrations: Do Agency determinations resulting in exemptions from some groundwater protection and post-closure care requirements amount to variances [§§724.190(a) (4) and 724.380(d)]?
- G. Landfills: Does the alternative demonstration of prevention of migration of hazardous constituents at any time in the future without following the design requirements of Part 724 amount to an Agency-granted variance [§724.401(b)]?
- H. Emergency Permits: Are these consistent with the procedural requirements in the Act (§703.221)?

#### IV. Appeals:

- A. Agency Record: Can the Board let the Agency incorporate documents by reference into the Administrative record [§705.210(e)]?
- B. Appeals from Enforcement-type Permit Modifications: Can these be saved by allowing appeals to the Board? Will the system work fast enough if the Board allows for appeal? Does the Administrative Procedure Act require an appeal?
  - Groundwater protection: Appeal by operator if he fails to convince the Agency that an increase in background was caused by another source or a sampling error [§724.198(i)];
  - 2. Financial assurance:
    - a. Appeal of disputes over estimated closure cost [§§724.242 and 724.244);
    - b. Agency refusal to release funds from closure trust or reduce a bond if estimated cost goes down [§§724.243(a)(7), (b)(7), (c)(7), (d)(7) and (k)];
    - c. Appeal mechanism if the Agency withholds payments from an insurance company to someone cleaning up a site [§724.243(e)(5)]. Who is the permittee? Will this require a Circuit Court action on the insurance contract?
- V. Facility Location Requirements:
  - A. S.B. 172 Amendments

- 1. Should the Board drop the specific notification requirements for local officials [§705.163(a)(5)]?
- 2. Should the Board drop the absolute requirement of an Agency hearing before issuing a RCRA permit [§705.182(a)]?
- B. Seismic Standards
  - Appendix VI to 40 CFR 264 says there are no Holocene faults in Illinois. Should the seismic information requirements and standards be deleted from the rules ¶§§703.184(a) and (b) and 724.118 (a)]? Or, is this a presumption which could be overcome by citizen testimony?
  - 2. Should the Board modify Part 724 to state the seismic rule of §21(k) of the Act, or is this preempted?
- C. Floodproofing: Note that S.B. 172 allows County approval only with proof that floodproofing is up to IDOT standards [§39.2(a)(4)]. Does this mean that the Agency cannot review the facility with respect to the Part 724 floodproofing rules [§§703.184 and 724.118(b)]?
- D. Other Facility Location Requirements: Do the other requirements of §21(k) apply to RCRA permits? Should the Board try to restate these in RCRA language in the rules, or just reference them and let the Agency apply the Act directly [§703.184(a)]? Will the Agency be able to consider underlying geological conditions and aquifers in reviewing the siting of hazardous waste landfills with double liners and a leak detection system?
- VI. Decision Periods: Are these applicable [§705.184(f)]?
- VII. Relationship to Chapter 7 and Chapter 9:
  - A. Copy of manifest is to be sent to the Agency [§§724.171(a)(4) and (b)(4)].
  - B. Should the Board delete the annual report requirement since the Agency can generate this information from manifests [§724.175(d)]?
  - C. Should the Board specifically require Chapter 7 permits for hazardous waste disposal sites which are exempt from RCRA because they only handle small quantities [§§703.123 and 724.101(g)(1)]?

VIII. State Control Over Financial Guarantors:

- A. Are insurance companies insuring risks in Illinois subject to regulation by the Department of Insurance? Does the Agency have the authority to deny a permit if required insurance is to be supplied by an insurer which is not in compliance with Illinois law [§§724.243 (e) (1) and 724.247(a) (1) (B)]?
- B. Does the Agency have adequate statutory authority to administer the cash bond for closure [§724.243(j) and Section 4(1) of the Act]?
- IX. Termination of Interim Status: Should the Board establish a definite date for termination of interim status with permits to be reopened if additional Part 724 standards are promulgated?

Proposal and Solicitation of Comments

In a separate Proposed Order, the Board has proposed to adopt Parts 703 and 724, and to amend Parts 702 and 705. Amendments to Parts 700, 704, 720, 721, 722, 723, 725 and 730 will be proposed in the near future.

Pursuant to Section 22.4(a) of the Act, Section 5 of the Administrative Procedure Act does not apply to this rulemaking. The Board will nonetheless publish a notice of proposed rulemaking in the Illinois Register and solicit comments for a period of 45 days.

Because the text of the proposal is lengthy, it will not be distributed with the Proposed Order or appear in the Opinion volumes. The public is asked to wait until the proposal appears in the Illinois Register. However, a copy will be placed in the file and will be made available for inspection and copying.

This Proposed Opinion will be placed in the file and will be distributed with the Order to persons on the notice list, but will not be published in the Opinion volumes.

This Proposed Opinion supports the Board's Proposed Order of this date.

I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Opinion was adopted on the day of Muss., 1983 by a vote of

Christan L. Moffe Clerk

Illinois Pollution Control Board