ILLINOIS POLLUTION CONTROL BOARD October 18, 1989

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IN THE MATTER OF:

IDENR SPECIAL WASTE CATEGORIZATION STUDY R89-13 (A)

INTERIM REQUEST FOR PUBLIC COMMENT

OPINION AND ORDER OF THE BOARD (by J. Anderson):

The Board is today seeking public comment regarding changes to the proposed rules. These changes has been made in response to comments received today during this First Notice period. The Board wishes to afford interested parties opportunity to comment on these changes prior to adopting a Second Notice Opinion and Order. Given the time-driven nature of this rulemaking, the Board will consider public comments on this draft filed <u>no later</u> than Friday, October 27, 1989.

In its order of August 10, 1989, the Board adopted for First Notice a proposal to create a new Part, 35 Ill. Adm. Code 808, and to amend an existing Part, 35 Ill. Adm. Code 809, of its regulations relating to special wastes. The proposed changes and additions were primarily undertaken to meet the statutory requirements of Sections 22.01 and 22.9 of the Environmental Protection Act (the Act). The content and legislative history of these two sections of the Act are set forth in pages 1 to 5 of the Opinion and Order of August 10, and will not be restated here.

Upon adoption of the proposal for First Notice, the Board scheduled and held two public hearings, the first in Springfield on September 1, 1989, and the second in Chicago on September 14; a third hearing, scheduled for September 15, was canceled after no one appeared to present testimony or examine witnesses. Testimony was presented at the hearings on behalf of the Department of Energy and Natural Resources (DENR), including its Hazardous Waste Resource and Information Center (HWRIC). Also presenting testimony were the Illinois Environmental Protection Agency (Agency), Mr. John Andrae of the DuPage County Health Department, the Board's Hearing Officer (in his capacity as a principal draftsman of the Board's proposal) and Dr. Harish Rao, head of the Board's Scientific/Technical Section (STS), which had prepared a draft regulatory proposal upon which many features of the Board's proposal were based. Prefiled comments and questions were received from the National Renderer's Association and Waste Management of Illinois. Prefiled testimony was provided by DENR and HWRIC representatives.

This draft Opinion and Order contains a number of modifications based on the testimony at hearing and public comments received to date. Generally, the draft as now crafted, a) clarifies that the toxicity ranking methodology developed by DENR/HWRIC is meant to supplement the present Agency system of evaluation, not replace it, b) includes other considerations as derived from the Agency's present policy paper, c) utilizes the DENR/HWRIC degree of hazard categories for which they have developed a scientific rationale (i.e. toxicity), but rely on the existing Agency evaluation system rather than those DENR/HWRIC rankings based on a "legal" rationale (e.g., pH), d) provides for a four-part manifest system plus quarterly or annual reports, e) removes amendatory language not directly related to the DENR/HWRIC classification system, including leaving intact the Board's now-existing hazardous (infectious) hospital waste regulations, and f) provides for a re-evaluation within twoyears for those wastes that the Agency earlier determined not to be special wastes.

THE HAZARD RANKING SYSTEM

Testimony provided by DENR and HWRIC focused on the three scientific studies and proposals for creating a system to rank special wastes according to their relative degree of hazard to human health and the environment. Witnesses for DENR and HWRIC were generally supportive of the Board's proposal (see, e.g., testimony of Dr. David Miller, R. 19-21). These witnesses also defended the HWRIC studies' choice of methodology, "break points" for hazard ranking chosen by HWRIC, and the toxicological data and reference compound (i.e., copper sulfate LD50) selected by HWRIC and proposed by the Board (see, e.g., testimony of Dr. Michael Plewa, R. 21-27). The witnesses for HWRIC and DENR stated that the computerized system is presently "up and running" and could be used on all wastes, providing that adequate information on the waste components were provided to the Agency by the applicant or were already in the data base (R. 42-44).

The witnesses felt that the system was conservative enough to avoid error for declassification purposes. In contrast, concerning its use for classifying at the high toxicity level, DENR/HWRIC stated that, since the system is conservative, there is a chance that a waste's high-hazard ranking would be lower if they had more specific information on constituents and toxicities (P. C. #4).

The witnesses also made clear that the degree of hazard system should be viewed as a <u>potential</u> degree of hazard system; it should be but one element within the overall evaluation by which the Agency would make a determination, and that the ranking could be adjusted up or down, depending on the appropriate modes of treatment or disposal of special wastes (e.g., R. 57-59).

The witnesses also acknowledged that a number of their rankings were not based on the scientific rationale they

developed. Rather, they utilized a "legal" rationale; they borrowed a regulatory standard applicable to some potential characteristic of waste from an unrelated federal or state regulatory program, for instance the federal RCRA standard for pH, and established a "break point" without use of refinement or incremental adjustment based upon the degree of hazard system (R. 61, 68, 71-73).

The witnesses also testified that the system's database and application program has utility as a planning device, whereby members of the regulated community could calculate the effects of process substitutions and system changes on the waste stream's degree of hazard (R. 40-52). They noted that the system could be applied manually. In any event, DENR/HWRIC argues for a state universal data base system (presumably maintained by the Agency), thus letting all know what the ground rules are (R. 47 and 52, P. C. #4). They also noted that new data should be screened by experts, so as to maintain a standardized system, and thus avoiding delisting evaluations by those lacking the expertise or access to literature (P. C. #4).

Dr. David Miller, Assistant Director and Research Program Manager of HWRIC, estimated that a computer and software appropriate for the purpose would cost the Agency about \$3000.00 (R. 31).

Several questions arose at hearing concerning the HWRIC ranking methodology and proposal. In response to the questions of Mr. James O'Brien, Manager of the Agency's Office of Chemical Safety (OCS) concerning the use solely of equivalent oral doses when the inhalation or dermal exposure route might be more appropriate DENR/HWRIC stated that the toxicity weighting table on Page 11 in the Plewa 1988 report takes this into account. Regarding Mr. O'Brien's concerns about lack of consideration of sub-acute or systemic chronic toxicity, DENR/HWRIC responded that relatively little data exists and, because the system is conservative, such values would have little effect anyway. Regarding Mr. O'Brien's comments on test method appropriateness, DENR/HWRIC responded that those parameters are difficult to measure, such as pH for solid samples; these could be left blank or a slurry with water could be analyzed. In any event, DENR/HWRIC asserted, the Agency needs to consider the use of these values in its final determination of the waste stream's status (R. 112-119, Exh. 4).

Mr. Andrae of DuPage County took particular note of the fact that toxicity appears to increase with volume using the DENR/HWRIC toxic hazard methodology (Appendix B, subpar. (B)), and asserted that this might render the methodology suspect as a means of classifying or declassifying certain wastestreams. (R. 391-395). DENR/HWRIC responded that the system focused on landfills, rather than effluents going into water and, as such, seeks to avoid a large volume of toxins where total mass may present a threat. (P. C. #4). In a somewhat related vein, IERG also noted some problems posed by a volume-dependent measure of toxicity, including examples of how the system could yield absurd results (P.C. #11, pp. 6-8). Mr. Andrae also stated the county's concern regarding the exemption from the manifesting requirements for septic pumpings and grease trap pumpings (R. 398-401).

COMMENTS AND QUESTIONS

The National Renderers Association argued in its pre-filed questions that licensed renderers, who are exempted currently from the manifest system pursuant to 35 Ill. Adm. Code 809.331, should be similarly exempted from the "Unmanifested Waste Report" requirements of proposed Section 809.502 (R. 256-257).

The Agency generally indicated that the proposed system was overly complicated, time consuming and unnecessary (R. 220, 237). The Agency proposed in its stead (R. 220) that the Board adopt a system of classification derived from the Agency's present guidance document (Exh. 7). Several commenters endorsed this view (P.C. #'s 10,11 and 14). The Agency also acknowledged that it rarely, and then only informally, utilizes the OCS to assist in the toxicity component evaluations components of its guidance document (R. 102, 147, 163 and 169-170).

One questioner, and two commenters representing the Illinois Steel Group and the Illinois Environmental Regulatory Group (IERG) (P.C. # 10, 11 and 14), suggested that DENR had failed to provide, on request, a copy of the computer program developed by DENR/HWRIC, and that this refusal had denied them access to data in order to meaningfully testify on or evaluate that system; they accordingly urged the Board to take no action based on the DENR system. DENR/HWRIC responded that they offered those with specifics on their waste stream "to come to our offices" to run the degree of hazard (P.C. #4, p. 5); they had not released the system because they didn't want others modifying the program, especially during its development phase. It now can be downloaded to a diskette. They want to assure that there is only one state system and thus need to assure that it is secure (R. 215-216, P.C. #4).

Comment was received after the hearings from the Metropolitan Water Reclamation District of Greater Chicago (P.C. #3), DENR (#4), the National Slag Association (P.C. #5), International Mill Service Inc. (P.C. #6), the St. Louis Slag Products Company (P.C. #7), the Steel Manufacturer's Association (P.C. #8), BFI Waste Systems (P.C. #9), the Illinois Steel Group (P.C. #10 and 14), the IERG (P.C. #11), the Edward C. Levy Co., Inc. (P.C. #12), the U.S. Department of Interior, Bureau of Mines (P.C. #13), Dr. David J. Schaeffer, Department of Veterinary Biosciences, University of Illinois (P.C. #15) and the Agency (P.C. #16).*

Comments 4 and 16 were in the form of responses to two sets of questions propounded in Orders issued by the Hearing Officer ("Further Questions for DENR/HWRIC Witnesses", September 12, 1989, and "Additional Questions for IEPA and DENR/HWRIC Witnesses", September 13, 1989). The Hearing Officer has been advised that the Agency and DENR are coordinating their activities to provide the Board with at least a partial response to the fourth question raised by the Hearing Officer in his September 12, 1989 order namely, that DENR run its degree of hazard (DOH) analysis on the requests which the Agency has already received and handled under its interim guidance policies over the past $2\frac{1}{2}$ years. Such a "cross check" will serve to either confirm or counter claims regarding whether the system is practicable, and will provide a comparison of results from use of the DENR system alone with results from use of the Agency's policy guidance alone.

Mr. Frank E. Dalton, General Superintendant of the Metropolitan Water Reclamation District of Greater Chicago (P.C. #3). Mr. Dalton suggested that a proposed Section 808.247 be added to the rules to continue to exempt municipal wastewater treatment plant sludge from classification as a special waste. He also urged that proposed amended Section 809.255 be revised to make clear that washings from a special waste hauling vehicle may not be discharged to a POTW except in compliance with all applicable local limits on discharges to that POTW. A somewhat similar suggestion was made by BFI Waste Systems (P.C. #9, third and fourth pages) and Waste Management of Illinois (WMI) (P.C. #1, p. 13).

In addition to faulting various aspects of the DENR/HWRIC proposal and the Board's draft rules, the Agency proposed that all special non-RCRA waste be manifested by using a four-part manifest augmented by an annual reporting requirement (R. 92-97, 218-219; P.C. #16), in lieu of the currently-required six-part manifest which the Agency characterized as imposing an unreasonable "paperwork burden" upon both the Agency and the regulated community without commensurate benefit in terms of increased Agency oversight (id.). Other commenters agreed with the Agency on this point (P.C. #8, 9 and 11). The Agency quantified this burden upon the Agency as growing rapidly and consisting of approximately 350,000 pieces of paper annually (R. 92-93). The Agency also suggested that the Board's rules should set forth minimum requirements for the annual reports which it suggests to augment a four-part manifest requirement.

^{*} Comments of a technical nature relating to the form of the rules for proposes of publication in the Illinois Register were also received from Mimi Griffiths, Administrative Code Division, Office of the Secretary of State (P.C. #2).

By far the greatest number of comments and questions regarding the proposal were received from WMI before the hearings (P.C. #1). Many of these questions and comments related to typographical errors and omissions, all of which have been duly On a substantive plane, WMI suggested that, in light of noted. their obvious stake in classification determinations as well as their knowledge of actual conditions, waste treaters and disposers should have a role as of right in the classification process (P.C. #1, pp. 1-2). WMI recommended that notice of pending classification requests be provided to such receiving sites, and that such sites be entitled to participate in Agency classification proceedings (see, e.g., R. 259-260 and P.C. #1, p. WMI also noted that numerous sections of the proposal (e.g., 5). proposed section 808.121(c)(1)) reference concepts embodied in sections or Parts not yet in existence, notably Part 811 (see R. 264-266, 326, 329-330, and 345-348). As noted by the Hearing Officer at hearing (R. 264-266), these sections, as well as those proposed sections of Part 809 establishing substantive requirements for waste haulers, including haulers of wastes other than special wastes (e.g., Sections 809.221-809.227) were drafted in the expectation of prior adoption of proposed rules in Board Docket R88-7; such prior adoption has not occurred. Finally, WMI noted several problems with the Infectious Hospital Waste rules as transported over to proposed rule 808.601 from Subpart I of Part 809. (R.322-329) and with the several substantive new requirements in Part 809 for waste haulers, including requirements for overnight parking and covers on waste trucks.

The largest number of post-hearing comments were received from persons concerned that the proposal would somehow have the effect of expanding the universe of materials considered to be "wastes" particularly with respect to slags generated in the production of iron and steel (P.C. #'s 5,6,7,8,10,12,13 and 14). All these commenters stated that such slags are fully utilized as products such as railroad ballast, concrete aggregate or as raw material in the manufacture of glass and mineral wool.

The Illinois Environmental Regulatory Group and the Agency expressed concern lest the new rules overturn prior Agency determinations under Section 22.9(d) of the Act (or otherwise create needless confusion (P.C. #'s ll and 16). Some commenters also observed that the DOH methodology may not always be applicable or practicable (P.C. #11, 15 and 16); they urged the Board to introduce sufficient flexibility in the rules to allow use of alternative modes of determining the nominal toxicity hazard posed by a given waste-stream, (P.C. #15 and 16). Dr. Schaeffer recommended a bioassay-based approach, which he has developed in a study undertaken for DENR and which he asserts can be easily implemented and made capable of guaging the synergistic and/or antagonistic effects of individual constituents in a waste stream so as to assess the toxicity of complex mixtures (P.C. #15).

BFI Waste Systems (BFI) joined in WMI's criticisms of the substantive requirements proposed in Part 809 to regulate waste haulers, including proposed requirements for overnight parking, maintenance and odor control. (P.C. #9). BFI suggested that "cover" be defined although at hearing two participants suggested that covers might be impractical, unnecessary or even detrimental in some cases (R. 345-353 and 388-389).

BOARD CONCLUSIONS AND RESPONSES TO COMMENTS

At the outset, the Board emphasizes that the purpose and effect of this proposed rulemaking does not include expansion of the universe of wastes. "Wastes" and "Industrial Process Wastes" are defined by the Act; judging from the several comments received regarding steel slags (e.g., P.C. #7), it would appear that such slags are properly defined as products unless abandoned or discarded, and to that extent are unaffected by this proposal. In light of the several comments which suggests that some persons misunderstand this fact, the Board will insert a clarifying sentence in Section 808.100(a).

Upon consideration of the several comments and questions and testimony at hearing, the Board is inclined to make several substantive changes in the proposed rule. It is clear, as many participants have noted, that references to certain provisions and concepts must be dropped from this rulemaking in view of the fact that rulemaking in R88-7 will not be completed in time for this proceeding. In consequence of this reality, all present references to Part 811 are proposed to be eliminated from proposed Part 808 and proposed amendments to Part 809, as are all substantive requirements in proposed amendments to Part 809 (e.g., proposed Sections 809.221-809.227) not relating directly to special waste classification.

In like manner, the proposed relocation of the hazardous (infectious) hospital waste rules from Part 809 to Part 808, together with the attendant changes to the text of those rules, must be deferred for the present. These wastes were not newly evaluated by DENR's methodology. Also, this change will accommodate the need to have separate reconsideration of the hazardous (infectious) hospital waste rules themselves. The Board is aware of ongoing "medical waste" legislative initiatives regarding infectious wastes generally, and believes that this also augurs against taking any new actions in this proceeding.

As for the DENR/HWRIC classification system, the Board concludes that it can and should serve as a <u>component</u> of a system for classification of special waste wastestreams. It is clearly not intended to be a means of classifying wastestreams in and of itself. It is also clearly a system which is to some extent volume-dependent Moreover, the Board will not utilize that part of the HWRIC ranking system which is not justified by its science-based methodology, but rather relies upon other standards (statutory or regulatory) adopted and in place for other wastestreams. The trouble with using such standards, such as the pH standard of RCRA, for example, is that such standards are not necessarily appropriate for or germane to the toxicity-based ranking in this rulemaking. Accordingly, Appendices C and D of Part 808 will be discarded for the time being. Although we await the results of a spot check of DENR's methodology on wastestreams which have been submitted previously to the Agency for declassification under Section 22.9(d) of the Act, we are not persuaded by the concerns about adopting the rules before the commentors could test the degree of hazard computerized system on their own computers on wastes of their choosing. DENR/HWRIC have tested the computer system extensively; the DENR/HWRIC approach has been available for testing at HWRIC's offices for some time. In any case, the commentors could have tested the system manually. In any event, the Board does not believe that rules, including these rules and certainly as presently crafted, should be held in abeyance for these reasons.

Moreover, the Board finds that the concepts embodied in the Agency's current policy guidance document provide some basis for a comprehensive system, but lack the discipline imposed by use of a formal ranking system such as proposed by the DENR/HWRIC toxic hazard ranking system. The testimony of Agency witnesses makes clear that the present system for determining declassification requests lacks a consistent approach for determining toxicity and utilizing the resources of its own OCS; absent regular use of a central body of information such as OCS there can be little assurance that determinations will be consistent or based upon current data. We do not find persuasive the Agency's assertion that the inclusion of the proposed formal system of evaluation is unnecessary or that the computerized system envisioned by HWRIC would be too onerous to use. On the other hand, as for the concerns over the applicability and volume-dependent measure of toxicity provided by Appendix B, newly proposed language in Section 808.245 intends to make clear that an applicant may show that the system is inapplicable, and use another equivalent or comparable approach. No regulatory procedure or standard works in every conceivable circumstance; the same remedies are available here as are available without an articulated degree of hazard system, except that a system provides a benchmark for evaluating disputes. Further, where volume is a factor in a lowered toxic score or classification, new subsection (f) of rule Section 808.245 requires that such factor be specified in the Agency's determination.

The Board is not convinced of the propriety of requiring that waste treaters or disposers be brought into the classification process as active participants. The proper role of operators of such facilities, in our view, is to assure that wastes received are as described, not to participate at the Agency level in the classification process. Moreover, practical considerations make involving the entire universe of potential destinations of a given wastestream unfeasible. The Board partially agrees with the comments from the Metropolitan Water Reclamation District of Greater Chicago; while we do not agree that all water or wastewater treatment sludges should be exempt from the definition by "special wastes"; we do agree that such sludges already regulated by the Agency under an approved sludge management plan should be exempt from the special waste manufacturing and hauling requirements. Section 808.121(b)(4) has been added to this effect.

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The Board is persuaded that the Agency is correct in asserting that the gathering of information by way of required reports based on a four-part manifest, rather than keeping the Agency in the six-part manifest loop, is warranted for non-RCRA special wastes. It is illuminating in this regard that USEPA requires only a four-part manifest even for RCRA hazardous wastes. It is certainly worth noting that, in the record of this docket as well as its predecessor dockets, R84-43 and R85-27, neither the Agency nor any member of the regulated community has ever suggested that there is a necessary function served by burying the Agency under an avalanche of manifest forms which ultimately are seldom, if ever, timely used owing to their sheer bulk. In so saying, the Board agrees with the concerns of DENR and others that, if the Agency is taken out of the loop, the required reports should include the same type of information, albeit reported on a less frequent basis. To this end, the Board has added subsections (h) and (i) to rule Section 809.501.

However, the Board does not believe that annual reporting provides an adequate measure of control over those wastes which are ranked as having a high degree of potential hazard. Hence, quarterly reporting will be required for Class A wastes; annual reporting will be required for all Class B wastes. Consequently, the Board will continue to distinguish between special wastes which pose a high degree of hazard and those which do not. Note that one related change the Board is making in its proposal is that wastes posing a "moderate" degree of hazard (i.e., those which achieve a score of 2 under the system) will be grouped together with wastes posing a low degree of hazard as Class B special wastes rather than as class A special wastes, as previously proposed.

INCORPORATION OF AGENCY POLICY

The language of Part 808 has been altered in an effort to "marry" the breadth and flexibility of the Agency's policy guidance memorandum with the HWRIC system for ranking relative toxic hazards. The casual reader, however, will have difficulty finding the Agency's existing guidance policy in this revised proposal because the Board has attempted to distill that policy into basic elements before blending it into the rules.

The Agency's guidance policy is set forth in the November 1986 Memorandum To solid waste generators entitled "Special Waste Determinations, Criteria and Procedures" (Exh. 7, Attachment "A"). That requires applicants for declassifying special wastes to provide information on:

- A. Aspects of the waste or waste stream;
- B. Health and Environmental Aspects; and
- C. Disposal Site Aspects.

On close examination, it may be seen that several of the subcategories of these major divisions are either unrelated to the major division (e.g., item A.1 relates to the identity of the applicant, not to the aspects of the waste or waste stream) or overlap with other subcategories, including subcategories of other major divisions (e.g., item A.5 which requires a "physical description and analysis, including contaminant components by the waste", appears to replicate item B.1.c., which requires a "physical description and components of the waste"). The Board has thus attempted to more clearly "sort out" the concerns which the Agency's policy addresses. Procedural matters aside, it appears that the Agency's concerns are as follows:

- A. Wastes whose physical form renders difficult to manage in a landfill or in storage or transit, such as wastes containing free liquids or consisting of finely divided particles. Items A.3, A.4, A.5, B.1.c., C.1, C.2.a and C.2.b. appears to be directed wholly or in part to this concern. The Board's proposal embodies this concern in Section 808.245(C)(1).
- B. Wastes whose chemical properties render them difficult to manage in a landfill or in storage or transit in the event of a leak or spill. Items A.4, A.5, B.7.a, B.1.b., C.1, and C.2.b appear to be directed wholly or in part to this concern. The Board's proposal embodies this concern in Section 808.245(c)(2).
- C. Wastes whose chemical properties threaten the integrity of containment devices and structures. Items A.5, B.1.b., B.1.d., B.1.e and C.2.b appear to be directed wholly or in part to this concern. The Board's proposal embodies this concern in Section 808.245(c)(3).

All three items are somewhat interrelated, particularly items B and C. For purposes of this proposal, the chemical properties of concern in item B are those which would pose a problem in the event of a loss of containment, such as a spill,leak or rupture. The chemical properties of concern in item C are those properties which promote the creation of a spill, leak or rupture due to the unstable nature of the waste. The same chemical property may exhibit both characteristics (e.g., a wastestream containing a high concentration of hydrochloric acid may tend both to threaten the integrity of -11-

containment due to its corrosivity and to make difficult the management of the waste in the event of a leak or spill due to its creation of toxic fumes and its mobility.

As for the specific manner of incorporating the Agency's policies, the Board has reasoned that the potential toxicity of a waste, represented by its "toxic score" as determined according to Appendix B or an equivalent means, should represent the "first cut" means of classifying a waste. Hence, a waste stream's toxic score will determine its classification unless (in the case of wastes receiving a toxic score of 1 or 2) its physical, chemical or "unstable" properties dictate the higher classification, or (in the use of wastes receiving a score of 1, 2 or 3) its mode of containment or treatment warrants assigning the waste to a lower classification (including declassification) in the form of a conditioned wastestream classification determination. Under this provision, finely divided waste dusts or powders might be expected to qualify for a reduced classification or for declassifiction based on the requirement that they be delivered for transport or disposal in bags, barrels or other containment which precludes air dispersal.

Wastes whose "toxic score" is zero would normally be expected to be declassified. However, the Board has retained the concept of "special handling wastes" to address those situations where the waste presents a hazard to persons handling it in the course of transport, storage or disposal operations notwithstanding its relative lack of toxicity. At hearing, discussions concerning talicum powder and similar types of nontoxic "fines" which nevertheless can present a potent threat to handlers if inhaled well illustrated the need for this type of mechanism to allow the Agency to keep tabs on shipment and disposal of such wastes.

One final note: the rules as today proposed do not define the "dangerous characteristics" alluded to in Section 808.245(e), nor do they itemize which characteristics are applicable to "special handling wastes" as defined in Section 808.110 and used in Section 808.242. It may be assumed that characteristics in the nature of those listed under 808.245(c)(1),(2), and (3) would tend to constitute "dangerous characteristics" and to render an otherwise declassifiable waste a "special handling waste". However, the Board will refrain from explicitly limiting the Agency in this regard, so as to afford the Agency opportunity to consider other types of "dangerous properties" or other types of circumstances which might warrant labelling a waste as a "special handling waste".

For the foregoing reasons, the proposal in this docket is modified for purposes of submitting an interim request for public comment to read as follows:

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE G: WASTE DISPOSAL CHAPTER I: POLLUTION CONTROL BOARD SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

PART 808 SPECIAL WASTE CLASSIFICATIONS

SUBPART A: GENERAL PROVISIONS

Section

Section

- 808.100 Purpose, Scope and Applicability
- 808.101 Transitional Rule
- 808.110 Definitions
- 808.111 Incorporations by Reference
- 808.121 Generator Obligations
- 808.122 Manifests
- 808.123 Small Quantity Generators

SUBPART B: CLASSES OF SPECIAL WASTE

- 808.240 Special Waste Classes
- 808.241 Default Classification of Special Wastes
- 808.242 Special Handling Waste
- 808.243 Categorical Wastes
- 808.244 Characteristic Wastes
- 808.245 Classification of Wastes
- 808.246 Toxicological Testing

SUBPART C: CRITERIA AND DATA REQUIREMENTS

Section

808.301 Degree of Hazard Determination by Computer 808.302 Data Base

SUBPART D: REQUEST FOR WASTE CLASSIFICATION

Section

- 808.400 Introduction
- 808.401 Application Forms
- 808.402 Application for Waste Classification
- 808.410 Physical and Chemical Analysis
- 808.411 Significant Trace Constituents
- 808.412 Common Names
- 808.413 Wastestream Description
- 808.420 Quality Assurance Plan
- 808.430 Degree of Hazard Data
- 808.431 Toxicological Testing

SUBPART E: REVIEW OF CLASSIFICATION REQUESTS

Section 808.501

Order of Requesting Information

- 808.502 Completeness
- 808.503 Standard for Classification

SUBPART F: WASTESTREAM CLASSIFICATION DETERMINATIONS

Section

- 808.520 Time for Agency Action
- 808.521 Conditions of Wastestream Classification
- 808.522 Final Agency Action

SUBPART G: MODIFICATION, APPEAL AND ENFORCEMENT

Section

- 808.541 Request for Reconsideration
- 808.542 Appeal
- 808.543 Effect of Classification
- 808.544 Enforcement
- 808.545 Modification

SUBPART H: CATEGORICAL AND CHARACTERISTIC WASTES

Section

- 808.600 Introduction
- 808.601 Reserved

Appendix A Assignment of Special Waste to Classes Appendix B Toxicity Hazard

AUTHORITY: Implementing Sections 21, 22, 22.01 and 22.9, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1987, ch. 111 1/2, pars. 1021, 1022, 1022.01, 1022.9 and 1027.)

SOURCE: Adopted in R89-13A at Ill. Reg. , effective

SUBPART A: GENERAL PROVISIONS

Section 808.100 Purpose, Scope and Applicability

- a) This Part provides a means by which persons may obtain a declassification or classification of special (non-RCRA) waste as defined in Section 808.110 to assure that the waste receives appropriate handling based on the degree of hazard of the waste or other characteristics. This Part does not apply to materials which are not special wastes as defined by the Act.
- b) This Part is intended to allow any person generating such special waste to request waste classification and prescribes procedures by which applicants may supply detailed information in order to establish the appropriate waste classification. For purposes of this

Part, the term "classification" includes declassification. Waste which has been declassified shall not be deemed to be special waste until further action to the contrary by the Agency pursuant to this Part.

Section 808.101 Transitional Rule

Wastestreams which have been declassified by the Agency pursuant to Section 22.9(c) of the Act prior to the effective date of these rules shall remain declassified for a period of not more than two years following the effective date of these rules, unless extended by the Board in a variance proceeding. In order to accommodate its workload, the Agency may by not less than 180 days' prior written notice require generators to make reapplication by a date certain within this two year time period; the Agency may extend its reapplication deadline for a period of not more than an additional 180 days but in no event may the Agency extend the deadline to a date more than two years following the effective date of these rules. Upon timely application, such wastestreams shall remain declassified during the pendency of any Agency determination or any appeal to the Board of such determination pursuant to Section 22.9(e) of the Act. As provided in Section 808.241, all special wastes not subject to the RCRA requirements of 35 Ill. Adm. Code 721 shall be deemed to be Class A special wastes unless a contrary determination has been made pursuant to this Part.

Section 808.110 Definitions

"Act" means the Environmental Protection Act, Ill. Rev. Stat. 1987, ch. 111 1/2, pars. 1001 et seq.

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"Declassified Waste" means a waste which has been determined pursuant to Section 808.245 to not be a special waste.

"Degree of hazard" is determined as provided in Section 808.247.

"Hazardous waste" is as defined in 35 Ill. Adm. Code 721.

"Special handling waste" is a declassified waste which, due to its form and mode of containment in transport, presents a danger to a person handling the waste such that the person needs information about the waste to safely "transport or store the waste". "Special handling waste" includes any such waste which would pose a danger if handled in a manner similar to household waste. "Dangers" include, but are not limited to, the following: fire, explosion, and emission of toxic or carcinogenic gas or dust. "Special handling waste" also includes any special waste which, because of appearance or packaging, resembles waste which would be a special handling waste. Such waste includes, but is not limited to, any special waste contained in a sealed drum. Irrespective of its degree of hazard ranking under Section 808.245, a special handling waste is a special waste.

"Special (non-RCRA) Waste" is any special waste not defined as a hazardous waste pursuant to Board RCRA regulations at 35 Ill. Adm. Code 721.

BOARD NOTE: Section 808.244 provides that special handling waste which would otherwise be declassified is at least a Type B special waste.

"Special waste" includes any hazardous waste, and any industrial process waste or pollution control waste which has not been declassified pursuant to Section 808.245.

"Waste" means a "solid waste" as defined in 35 Ill. Adm. Code 810.103.

Section 808.111 Incorporations by Reference

a) The Board incorporates the following materials by reference:

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

ANSI/ASQC Cl-1985, "Specification of General Requirements for a Quality Program", approved November, 1985.

ANSI/ASQC S1-1987, "An Attribute Skip-Lot Sampling Program", approved March 6, 1987.

ANSI/ASQC Q94-1987, "Quality Management and Quality System Elements -- Guidelines", Approved June 15, 1987.

ANSI/ASQC Z1.4-1981, "Sampling Procedures and Tables for Inspection by Attributes", Approved 1981.

ANSI/ASQC Z1.9-1980, "Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming", Approved March 6, 1980.

ASTM. Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103, (215) 299-5400: ASTM Standard D 3828-87 "Standard Test Methods for Flash Point of Liquids by Setaflash Closed Tester", approved December 14, 1987.

ASTM Standard E 896-87 "Standard Test Method for Conducting Aqueous Direct Photolysis Tests", approved September 25, 1987.

ASTM Standard E 1147-87 "Standard Test Method for Partition Coefficient (n-Octanol/Water) Estimation by Liquid Chromatography", approved February 27, 1987.

ASTM Standard E 1148-87 "Standard Test Method for Measurements of Aqueous Solubility", approved April 3, 1987

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

"Methods for Chemical Analysis of Water and Wastes", Third Edition, March, 1983. (Document number PB 84-128677)

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication number SW-846 "United States Environmental Protection Agency (Third Edition, November, 1986)."

b) This Section incorporates no future amendments or editions

Section 808.121 Generator Obligations

a) Each person who generates waste shall determine whether the waste is a special waste.

(BOARD NOTE: 35 Ill. Adm. Code 722 requires the person to also determine if the waste is a hazardous waste.

- b) No person shall deliver special waste to a hauler unless the waste is accompanied by a manifest as specified in Section 808.122 and the hauler has a special waste hauling permit issued pursuant to 35 Ill. Adm. Code 809. The following are exceptions to this prohibition:
 - 1) The person is subject to the small quantity generator exemption of Section 808.123.
 - 2) The hauler and waste are subject to a hauler exemption under 35 Ill. Adm. Code 809.211.

- 3) The Agency has determined pursuant to this Part that the waste is not a special waste.
- 4) The waste consists of municipal water or wastewater treatment plant sludge regulated under a sludge management plan approval by the Agency pursuant to 35 Ill. Adm. Code 309.208.
- c) No person shall cause, threaten or allow the treatment, storage or disposal of special waste in Illinois except:
 - At a facility permitted or otherwise authorized to manage the special waste pursuant to 35 Ill. Adm. Code 703 or 807; or
 - 2) At a facility owned and operated by such person and subject to the on-site disposal exemption of Section 21(d) of the Act.
- d) No person shall deliver special waste to a hauler or a permitted facility without a supplemental wastestream permit.
- e) No person shall deliver to a hauler or permitted facility waste which has been classified or declassified by the Agency pursuant to this Part unless the waste conforms with the description and characteristics in the wastestream classification determination.

Section 808.122 Manifests

If required by Section 808.121(b), the generator of any special waste shall prepare a manifest in the form prescribed by 35 Ill. Adm. Code 809.501 prior to shipment.

Section 808.123 Small Quantity Generators

Any person who generates a total quantity of a special waste of 100 kilograms (220 pounds) or less in any calendar month is not required to initiate a manifest when delivering such special waste to a hauler providing that such waste shall not be accumulated for more than 190 days prior to shipment. In any action to enforce the terms of this Section, the burden of proof shall be on the generator to establish compliance with the time limit on accumulation.

SUBPART B: CLASSES OF SPECIAL WASTE

Section 808.240 Special Waste Classes

 This Subpart contains rules for the classification and declassification of special wastes other than those special wastes which are hazardous pursuant to 35 Ill. Adm. Code 721. There are two classes of such special waste, "Class A" and "Class B". Wastes which are found pursuant to this Part to pose a negligible degree of hazard shall be declassified; such declassified wastes shall be deemed to be refuse which is not special waste; however, such refuse remains subject to applicable Board regulations regarding the transport, treatment, storage and disposal of non-special wastes.

- b) "Class A" special wastes are those special wastes which the Agency has not determined pursuant to this Part to be a Class B special waste. "Class B" special wastes are those wastes which the Agency determines pursuant to this Part pose a low or moderate degree of hazard to the environment or the public health in the course of their transportation, storage, treatment or disposal.
- c) This Subpart should be read in conjunction with the flowchart in Appendix A. The Sections of this Subpart are arranged such that the first Section which assigns a waste classification to the waste controls.
- d) Subpart D contains procedures by which a person requests that the Agency assign special wastestreams to classes.

Section 808.241 Default Classification of Special Wastes

Any industrial process waste or pollution control waste which is not a RCRA hazardous waste is a Class A special waste unless and until demonstrated otherwise to the Agency pursuant to this Part.

Section 808.242 Special Handling Waste

The Agency may determine that, notwithstanding its degree of hazard, a declassified waste is a special handling waste. Any such waste shall be so identified by the Agency, together with appropriate conditions on its form and mode of containment in transport. A declassified waste which is determined to be a special handling waste is a Class B special waste.

(BOARD NOTE: This rule sets the special handling flag. A special handling waste will require manifesting regardless of the predicted degree of hazard score under Section 808.245, to protect the waste hauler, the disposal operator and their employees.)

Section 808.243 Categorical Wastes

- a) Subpart H identifies certain categorical wastes and assigns them to classes.
- b) A waste which meets the criteria for inclusion within a category is a special waste of the class specified for the category.

Section 808.244 Characteristic Wastes

- a) Subpart H identifies certain waste characteristics and assigns wastes meeting the characteristics to classes.
- b) A waste which exhibits a characteristic is a special waste of the class specified for the characteristic.

Section 808.245 Classification of Wastes

Special wastes which are subject to this Subpart shall be classified or declassified as follows:

- a) Compute the toxic score for the wastestream pursuant to Appendix B, utilizing a data base which meets the standards of Section 808.302; however if use of Appendix B is determined by the Agency to be inapplicable or unavailable for the wastestream in question, the toxic score may be estimated using equivalent or comparable procedures. Where applicable, such toxic score shall include the maximum volume of waste to which such score applies.
- b) Except as authorized under subsection (e), wastes receiving a toxic score of 3 shall be deemed to be Class A special wastes.
- c) Except as authorized under subsection (e), wastes receiving a toxic score of 1 or 2 shall be deemed to be Class B special wastes; however, such wastes shall be deemed to be Class A special wastes if the Agency determines that:
 - 1) The physical form of the waste renders it difficult to manage in transport, storage or handling prior to final disposition, or in a landfill. Examples of wastes possessing such form are wastes containing free liquids, and wastes in finely divided form which are conducive to airborne dispersal.
 - 2) The chemical properties of the waste, if exposed to the atmosphere or to an aqueous environment, render it difficult to manage in the event of a leak, spill or other inadvertent loss of containment during transport, storage or handling prior to final disposition, or in a landfill. Examples of wastes possessing such properties are wastes which produce noxious or toxic fumes or gases in sufficient concentration and quantity to pose a threat to the public health or the environment, wastes which are ignitable or flammable, wastes which are readily soluble in water, and wastes

which are highly mobile in an aqueous environment, including groundwater.

- 3) The unstable nature of the waste renders it difficult to contain during trasnport, storage or handling prior to final disposition, or in a landfiel. Examples of wastes possessing such unstable nature are wastes which are corrosive or reactive, and any other wastes which, under foreseeable conditions, may cause the premature failure of containment devices and structures.
- d) Wastes receiving a toxic score of 0 shall be declassified, except that such wastes determined by the Agency to be special handling wastes shall be deemed to be at least Class B special wastes.
- e) Notwithstanding a wastestream's toxic score, the Agency may condition a lowered classification or a declassification of a special waste under this Section. Such conditions shall be limited to measures by which the generator shall by particular modes of containment or treatment assure that the dangerous characteristics of the wastes are avoided or reduced; however, under no circumstances shall a wastestream with a toxic score of 3 be declassified based solely upon its mode of containment. Examples of such measures are neutralization of acidic wastes prior to shipment, containment or encapsulation of finely divided wastes, and treatment of ignitable wastes so as to preclude ignition.
- f) All conditions or limitations related to the toxic score (including, where applicable, maximum wastestream volume) and classification on declassification of a wastestream shall be specified in the Agency's determination.

Section 808.246 Toxicological Testing

A waste may be assigned to a class based on toxicological testing of either the waste or its components.

SUBPART C: CRITERIA AND DATA REQUIREMENTS

Section 808.300 Introduction

This Subpart governs criteria and data requirements used to predict the degree of hazard pursuant to Section 808.245.

Section 808.301 Degree of Hazard Determination by Computer

 The Agency may employ electronic data processing equipment and programs to accomplish the purposes of this Subpart. Any such program must assign a degree of hazard according to the method specified in Section 808.245.

b) The program must display all data used in each degree of hazard prediction, together with the source of the data.

Section 808.302 Data Base

- a) This Section governs the data base which may be employed to assess the physical, chemical and toxicological properties of waste constituents.
- b) The data base shall consist of data from any source which the Agency determines is reasonably reliable as a basis for decision. Reasonable reliability of a source shall be assessed by reference to factors including, but not limited to, its scientific validity, the consistency with which the source reflects directly observable data, including monitoring data, and the consistency of results of repeated applications of data and formulae. Such data sources include, but are not limited to the following:
 - 1) Data from standard reference sources;
 - Data published or incorporated by reference by a federal regulation or by a regulation adopted by an agency of the State of Illinois;
 - 3) Data included in the application under consideration and in written communications between the applicant and the Agency or their representatives, with respect to the application;
 - Data previously used by the Agency in other wastestream categorization determinations.
 - 5) Data from Agency inspection, permitting and enforcement files relating to the generator or the wastestream, excluding complaint forms except wher the complainant will be available voluntarily for deposition and examination under oath at any hearing on appeal pursuant to Subpart G.
- c) The Agency shall make available for inspection and copying by the public a list of the data sources which it believes meets the criteria of subsection (b) of this Section, excluding any data described in subsection (b)(3) of this Section.

SUBPART D: REQUEST FOR WASTE CLASSIFICATION Section 808.400 Introduction

- a) This Subpart specifies the procedures used to obtain a waste classification from the Agency.
- b) Waste classification may be requested by generators of special waste as specified in Subpart A.

Section 808.401 Application Forms

Persons applying for waste classification shall use application forms promulgated by the Agency.

Section 808.402 Application for Waste Classification

An application for waste classification shall, at a minimum, include the following information:

- a) Basic information.
 - 1) The name, address and phone number of the original generator.
 - 2) The original generator's United States Environmental Protection Agency (USEPA) identification number (35 Ill. Adm. Code 722.122) and the Agency identification number, if the original generator has already obtained either.
 - 3) The name and address of any treater of the waste.
 - Any treater's USEPA identification number and Agency site number.
 - 5) Whether any treater has a RCRA permit or interim status.
 - 6) A chemical and physical analysis as specified in Section 808.410.
 - A wastestream description as specified in Section 808.413.
 - A quality assurance plan as specified in Section 808.420.
 - 9) A description of any treatment processes.
 - 10) Identification of the disposal site or sites to which the applicant proposes to send the waste.

(BOARD NOTE: This information is requested to assist the Agency in reviewing the application. These rules do not preclude use of a disposal site which is not identified in the application for classification.)

- 11) Wastestream number of any supplemental wastestream permit issued for the waste pursuant to 35 Ill. Adm. Code 807.210, and the expiration date of any such permit.
- b) The rationale for requesting classification, including all relevant calculations and other bases for conclusions. If Appendix B of this Part has not been utilized for purposes of calculating the toxic score, such rationale shall indicate the reasons for using an alternative means of determining the toxic score, including an explanation as to whether the alternative means chosen is equivalent to Appendix B.
- c) Data establishing that the waste is not a hazardous waste pursuant to 35 Ill. Adm. Code 721.

(BOARD NOTE: Wastestream categorization is not applicable to RCRA hazardous waste. If the generator anticipates that this will be an issue, the generator should include documentation supporting the claim that the waste is not a hazardous waste pursuant to 35 Ill. Adm. Code 721.)

- d) Data bearing on whether the waste is a special handling waste, including the physical form of the waste and the mode of containment, if any, during transport.
- e) Whether the waste is a categorical or characteristic waste.
- f) Sufficient physical, chemical and toxicological data to assign a degree of hazard pursuant to Section 808.245 pursuant to Section 808.430.
- g) If necessary, results of toxicological testing as specified in Section 808.431.
- h) Such additional information as the generator believes is appropriate to show that the waste should be classified as the generator requests.
- i) Such additional information as the Agency determines is necessary for it to assign the waste to a class. The Agency may specify additional information by a request directed to the individual applicant.

Section 808.410 Physical and Chemical Analysis

Physical and chemical analysis of wastes for purposes of this Subpart shall be as follows:

- a) Samples must be representative of the wastestream.
 - 1) Samples must include all waste phases.
 - 2) Samples must be taken from areas distributed spatially within the waste bulk.
 - 3) Samples must be distributed over sufficient time to account for variation in the wastestream through work shifts, seasons, etc.
- b) The following properties shall be determined and reported:
 - 1) The physical state of each waste phase.
 - 2) pH.
 - 3) Flashpoint.
 - 4) Results of an EP toxicity test as specified in 35 Ill. Adm. Code 721.124.
 - 5) Density.
- c) The waste shall be analyzed for its constituents as follows;
 - The analysis must include all materials introduced into a process, and all materials which come into contact with products and materials produced by the process or in storage including end products and impurities.
 - The analysis must include chemicals which will react with each other under the process conditions.
 - 3) If available, the analysis must use the Chemical Abstracts Service (CAS) name and number for each constituent, or a name from the list of common names pursuant to Section 808.412. Otherwise, the person requesting classification shall provide a name and complete description of the constituent.
 - 4) The analysis shall include a list of major constituents and concentrations which accounts for at least 99% of the mass of the waste. The list may include an entry for "other" or "unknown", if adequately characterized by the list of significant

trace constituents provided for below. The analysis shall list major constituents of the waste rounded to the nearest tenth of a percent, and shall be supported by a mass balance.

- 5) Significant trace constituents. The generator shall include a list and the concentration of all significant trace constituents as defined in Section 808.411.
- 6) The analysis shall identify all major constituents and significant trace constituents as are listed in 35 Ill. Adm. Code 721.Appendix H.
- d) The analysis must report the average concentration or percentage mass value and expected range of each major constituent and significant trace constituent. The expected range must predict the interval within which 95% of analyses for the constituent are expected to fall. The error analysis must take into account the following:
 - 1) Temporal variation in the wastestream properties;
 - 2) Uncertainties arising from sampling the waste; and
 - 3) Uncertainties arising from the method of analysis.

Section 808.411 Significant Trace Constituents

A significant trace constituent is a constituent revealed by analysis:

- a) Which is present at a concentration percentage mass less than 1%; and,
- b) Which has a toxicity, BiTi, as determined in Appendix B, less than 500 mg/l.

Section 808.412 Common Names

The Agency shall adopt a list of common names, together with a description of each.

(BOARD NOTE: The purpose of this provision is to promote greater consistency in the naming of constituents which are not amenable to chemical nomenclature. The Agency may use this mechanism to assign common names to constituents. Suggested names include: Sand, water, wood, foodstuff. In addition, this mechanism can be used to assign a name and toxicological properties to complex mixtures after these have been determined for a wastestream or a type of waste-generating process.

- a) The wastestream description must include the following:
 - The name of the generator if other than the original generator identified in Section 808.402(a)(1);
 - 2) The name of the wastestream as assigned by the Agency under Section 808.412, or as assigned by the generator if no name has been assigned by the Agency;
 - The activity, production process or treatment process which gives rise to the waste;
 - 4) A general description of the physical and chemical properties of the wastestream including anticipated annual volume.

(BOARD NOTE: This description may be summary and narrative; detailed description of physical and chemical properties of the wastestream is governed by Section 808.410).

b) The wastestream description may include a description of a range of physical and chemical properties of the wastestream based on physical and chemical analysis pursuant to Section 808.410, associated with periodic, occasional or anticipated changes in the process which produces the waste (e.g., changes in materials used as coatings, bonding agent or solvents).

(BOARD NOTE: The wastestream description differs from the waste analysis discussed above. The wastestream description should describe the waste which the applicant wishes to have classified, which may not be exactly what the applicant presently produces. The waste which is subjected to analysis must fit within the wastestream description, but need not be identical to all permutations of it. To avoid having to necessarily repeat the waste classification process, the applicant should request classification of a broadly-defined and characterized wastestream so as to cover any periodic, occasional or anticipated modification to the waste properties. However, this will tend to increase the degree of hazard ranking of the wastestream.)

Section 808.420 Quality Assurance Plan

A quality assurance plan shall detail steps which the generator will take to ensure that waste conforms with the wastestream description.

- a) The plan must include employee orientation measures, such as the following:
 - Assignment of responsibility for assuring compliance;
 - Employee training;
 - 3) Work rules;
 - 4) Posting of signs;
 - 5) Positioning of waste receptacles.
- b) The plan must include periodic and random inspection, sampling and analysis of the wastestream to ensure that it conforms with the wastestream description. The plan must be designed so that there is at least a 95% probability that loads meet the wastestream description. The plan may specify measures to be taken to account for variables in the properties by the wastestream so as to prevent false negatives.

(BOARD NOTE: The applicant should use statistical quality control to devise a plan with an inspection schedule which meets the above standard based on the properties and variability of the wastestream.)

c) The plan may provide for inspection, sampling and analysis by the permitted facility which receives the waste. If so, the plan must include a written agreement by the receiving facility detailing what it will do.

(BOARD NOTE: The permitted facility is required by permit and by 35 Ill. Adm. Code 811 to inspect, sample and analyze wastes it receives. This is distinct from similar activities undertaken by contract on behalf of the generator pursuant to this Section.)

Section 808.430 Degree of Hazard Data

a) The applicant shall include its degree of hazard prediction, including the estimated toxic score, with the application.

(BOARD NOTE: The applicant may include the results of a degree of hazard prediction performed by a computer program.)

b) The Agency may request additional data if necessary to assign the waste to a class and the application contains inadequate information to determine the degree of hazard of the waste. (BOARD NOTE: If the Agency requests data, the request may include a computer-generated result of an attempt to perform the degree of hazard prediction, with a specific request for needed data.)

- c) Degree of hazard data shall include sufficient information to predict the degree of hazard of the waste pursuant to Section 808.245. The data includes, but is not limited to, the following with respect to each constituent, in addition to the information normally present in the physical and chemical analysis above:
 - 1) Toxicity;
 - 2) n-Octanol/water partition coefficient;
 - 3) Persistence, measured as the half-life in days; and
 - 4) Solubility in water in parts per million on a weight basis.

Section 808.431 Toxicological Testing

- a) The applicant may elect to include the results of toxicological testing of components of the waste or of the waste itself.
- b) The Agency shall request that the applicant perform toxicological testing of components or of the waste if a degree of hazard determination is necessary to assign the waste to classes and the Agency concludes that there is not adequate information in its data base to determine the degree of hazard.
- c) Testing shall be to determine an LD50 oral rat. The Agency may approve alternative toxicological testing if the applicant demonstrates why an LD50 - oral rat cannot be measured. The applicant shall document the relation of the chosen parameter to an LD50 - oral rat.

SUBPART E: REVIEW OF CLASSIFICATION REQUESTS

Section 808.501 Order of Requesting Information

a) If possible, the Agency shall categorize the wastestream without requesting or using degree of hazard data pursuant to Section 808.430. Nothing herein shall preclude the Agency from requesting or using degree of hazard data to confirm the characteristics of the waste.

(BOARD NOTE: For example, if the waste is a categorical waste, it should be assigned to the type for that category without resort to degree of hazard data.)

b) If after requesting and receiving degree of hazard data pursuant to Section 808.430, the Agency still cannot determine the degree of hazard, the Agency shall request toxicological testing pursuant to Section 808.431.

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Section 808.502 Completeness

- An incomplete application is one which has insufficient information to classify the waste, including the lack of degree of hazard data or toxicological testing, if necessary.
- b) If the Agency determines that an application is incomplete, it shall classify the waste as a Class A special waste unless the Agency determines, based on such information as may be available, that the waste is a RCRA hazardous waste pursuant to 35 Ill. Adm. Code 721. However, if the applicant waives the decision period specified by Section 808.504, the Agency may hold an application pending receipt of additional information.

Section 808.503 Standard for Classification

Pursuant to Section 808.245, the Agency shall assign special waste to a class or shall declassify the waste.

SUBPART F: WASTESTREAM CLASSIFICATION DETERMINATIONS

Section 808.520 Time for Agency Action

- a) The Agency shall issue a wastestream classification determination within 60 days after the date of receipt of a complete application. An application shall be deemed complete 30 days following receipt by the Agency unless the Agency notifies the applicant otherwise in writing.
- b) The applicant may waive the time for Agency action.
- c) As provided in Section 22.9(e) of the Act, IF THE AGENCY FAILS TO ACT WITHIN 60 DAYS AFTER RECEIPT OF THE REQUEST, THE APPLICANT MAY SEEK REVIEW BEFORE THE BOARD PURSUANT TO SECTION 40 OF THE ACT AS IF THE AGENCY HAD DENIED AN APPLICATION FOR A PERMIT.

Section 808.521 Conditions of Wastestream Classification

The Agency shall include the following conditions in each wastestream classification determination:

a) Wastestream description.

- b) Wastestream identification number assigned to the specific determination.
- c) Classification of the special waste.
- d) Limitations on the management of the waste consistent with this Part, and 35 Ill. Adm. Code 809.
- e) Quality assurance plan.
- f) Expiration date.
- g) Such addition conditions as the Agency determines are necessary to assure that waste managed pursuant to the classification determination is of the class specified.

Section 808.522 Final Agency Action

Final Agency action shall consist of a final determination of a wastestream classification request. The Agency takes final action on the date the wastestream classification determination is mailed to the applicant.

SUBPART G: MODIFICATION, APPEAL AND ENFORCEMENT

Section 808.541 Request for Reconsideration

- a) Within 35 days after the Agency takes final action, the applicant may request reconsideration.
- b) The time for appeal is stayed pending the Agency's action on the request for reconsideration.
- c) If the application is a request for modification of a previous final wastestream determination, the new determination is stayed and the applicant shall continue to manage waste pursuant to the old determination. Otherwise, the applicant shall manage the waste in accordance with the new determination pending reconsideration.
- d) The Agency's review of a request for reconsideration is subject to the same procedures as the original application.

Section 808.542 Appeal

 a) Within 35 days after the Agency's final action, the applicant may appeal a wastestream classification determination to the Board: Appeals under this section shall be subject to the requirements applicable to permit appeals pursuant to 35 Ill. Adm. Code 105.

- b) The record before the Board consists of the data base which was considered by the Agency at the time the Agency took final action. The applicant may supplement the record before the Board only under one or more of the following conditions:
 - 1) If the applicant attempted to place the information into the data base before the Agency.

(BOARD NOTE: This provision is intended to prevent the use of appeals to challenge the validity of degree of hazard data through the introduction of new information without the Agency having the opportunity to reconsider.)

2) If the data base filed by the Agency is not complete with respect to materials identified in subsection (b)(3) of Section 808.302.

Section 808.543 Effect of Classification

A wastestream classification provides the generator with a determination necessary to obtain a wastestream identification number or to obtain a modification to a supplemental wastestream permit, which in turn is necessary for completion of manifests and reports required by this Part, 35 Ill. Adm. Code 809 and 807. The wastestream classification authorizes the generator, hauler and permitted facility to transport and manage waste meeting the wastestream description in accordance with regulations governing the transportation and management of special waste of the class provided in the classification determination.

Section 808.544 Enforcement

Any person may bring an enforcement action pursuant to Title VIII of the Act and 35 Ill. Adm. Code 103. Penalties are as provided in Title XII of the Act. Sanctions include revocation of a wastestream classification determination.

Section 808.545 Modification

 A person who has received a wastestream classification may request modification at any time by filing a new application.

(BOARD NOTE: The generator has to file a new application at the time the waste the generator produces no longer meets the wastestream description.)

b) The Agency shall modify a wastestream classification to reflect changes in the Act or Board regulations. The Agency shall give the generator at least 30 days prior written notice before it modifies the wastestream classification.

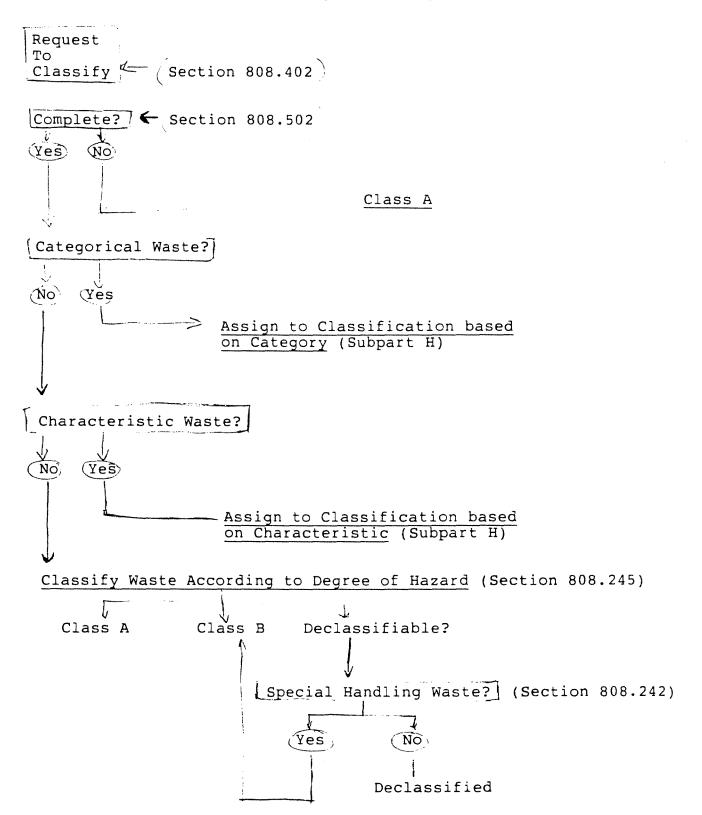
SUBPART H: CATEGORICAL AND CHARACTERISTIC WASTES

Section 808.600 Introduction

- a) This Subpart defines "categorical wastes" by the type of generator producing the waste, by the process from which the waste arises or by name. This Part also defines "characteristic wastes" based on physical or chemical properties of the waste.
- b) Categorical and characteristic wastes are assigned to special waste classification based on their general properties, regardless of the degree of hazard of individual wastes or wastestreams.

Section 808.601 (Reserved)

Section 808.Appendix A: Assignment of Special Waste to Classes



Section 808. Appendix B Toxicity Hazard

a) The wastestream equivalent toxic concentration is calculated as follows:

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Ceq = A SUM(Ci / BiTi)

where:

- SUM means the sum of the results of the calculation in parentheses for each component of the wastestream.
- Ci is the concentration of component i as a percent of the waste by weight.
- 3) Ti is a measure of the toxicity of component i, as provided in paragraph (h).
- 4) A is equal to 300.

(BOARD NOTE: A is a constant used to allow the entry of percent values for Ci, and to adjust the results so that a reference material, 100% copper sulfate, with an oral toxicity of 300 mg/kg, achieves an equivalent toxicity of 100. Under the following paragraphs, 100 kg/month of the reference material has a "toxic amount" of 10,000, defining the borderline between a "toxic score" of 2 or 3 for a small quantity generator.)

- 5) Bi is a constant used to convert toxicities (Ti) to equivalent oral toxicities. Bi is determined from paragraph (i).
- b) S is the maximum size of a wastestream shipment in kg. Such maximunm size shall be specified as a condition of the wastestream classification.
 - 1) Off-specification, surplus or spoiled food products and byproducts shall be assigned a toxic score of 0 and shall not be subject to the other provisions of this Appendix B. This subsection shall not apply to such food products or byproducts which are contaminated by substances which are subject to the other provisions of this Appendix B, or to other types of wastes resulting from the processing or production of food products.
 - Ceq is the equivalent concentration from paragraph (a).
- c) Calculate the toxic score as follows:

- 1) If the toxic amount is less than 100, the toxic score is 0.
- 2) If the toxic amount is greater than or equal to 100 and less than 1000, the toxic score is 1.
- 3) If the toxic amount is greater than or equal to 1000 and less than 10,000, the toxic score is 2.
- 4) If the toxic amount is greater than or equal to 10,000, the toxic score is 3.
- d) Assign to types based on toxicity.
 - 1) If the toxic score is 0 or 3, the toxic score is used in Section 808.245 without adjustment.
 - If the toxic score is 1 or 2, the toxic score is adjusted based on environmental fate pursuant to the following paragraphs.
- e) The environmental fate score (F) is calculated as follows:

F = SUM(CiLi)

where:

- SUM means the sum of the results of the calculation in parentheses for each component of the wastestream.
- Ci is the concentration of component i as a percent of the waste by weight.
- Li is the environmental level of the component as determined by paragraph (j)
- f) Adjust toxic score
 - 1) If the environmental fate score is less than 100, subtract 1 from the toxic score.
 - If the environmental fate score is greater than or equal to 100 and less than 200, the toxic score is not modified.
 - 3) If the environmental fate score is greater than or equal to 200, add 1 to the toxic score.
- g) Return to Section 808.245 with the toxic score or adjusted toxic score.
- h) Sources of toxicity data.

- 1) The generator is required to provide information to substantiate that any waste is other than a type A waste.
- 2) Carcinogens and mutagens. If available, use a TD50 oral rat. Otherwise:
 - A) Carcinogens are assigned a Ti of 0.1 mg/kg; and
 - C) Mutagens are assigned a Ti of 0.6 mg/kg.
- The best toxicity value is selected according to the following criteria.
 - A) Toxicities are converted to equivalent oral toxicities as specified in paragraph (i).
 - B) Toxicity values are ranked by source according to the following priorities, with the better sources listed first.
 - i) Oral rat; inhalation rat; dermal rabbit; or, aquatic toxicity.
 - ii) Other mammalian toxicity values.
 - C) If there is more than one value for the toxicity from the best available source, the lowest (most toxic) equivalent oral toxicity value is used.
- i) Conversion factors for equivalent oral toxicities (Bi):

<u>Toxicity measure</u> Oral - LD50	Units mg/kg	Bi l.
Carcinogen/mutagen TD50	mg/kg	1.
Aquatic - 48 or 96 hour LC50	ppm	5.
Inhalation - LC50	mg/l	25.
Dermal - LD50	mg/kg	0.25

- If a carcinogen or mutagen is assigned a value for Ti in the absence of a TD50, Bi is assigned a value of 1.
- j) Environmental levels (Li). If the component is innocuous, Li is equal to 0. Otherwise, Li for a component is the highest level for that component in the following table, based on bioaccumulation, persistence

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and solubility. If a value is on the boundary between ranges, the higher value of Li is used.

Bioaccu Min.	Max.	Pers. Min.	istence Max.	<u>Solubil</u> Min.	ity Max.	<u>Li</u>
5		365		10,000		3
4	5	30	365	1000	10,000	2
0	4	0	30	0	1000	1

- "Innocuous" components are those for which BiTi, as determined in paragraph (a), is greater than 5000mg/kg.
- 2) Bioaccumulation is measured as to logarithm to the base 10 of the n-octanol/water partition coefficient for the constituent, measured according to ASTM E 1147, incorporated by reference in Section 808.111.
- Persistence is determined as provided in paragraph (k).
- 4) Solubility is measured as parts per million on a weight basis. Solubility may be measured according to the method described in ASTM E 1148, incorporated by reference in Section 808.111.
- k) Persistence. If available, a value for persistence measured as provided in subsection (k)(1) must be used. Otherwise, the table of subsection (k)(2) must be used.
 - Persistence must be measured according to the method described in ASTM E 896, incorporated by reference in Section 808.111.
 - 2) Persistence may be estimated using the following table. Constituents which fit into more than one category have the longest half life indicated.

Type of Compound or Material	Half Life (days)
Metal, metal oxide or inorganic oxide	366
Inorganic salts	366
Asbestos	366
Clay	366
Plastics or polymers	366
Pesticides	366

Halogenated hydrocarbons Polyaromatic hydrocarbons and biphenyls Phthalate esters Paper products Fats, oils and greases Resins and pigments Aromatic and alicyclic hydrocarbons Aliphatic hydrocarbons	366 366 366 366 366 366 31
More than 10 carbons	31
10 carbons or less	1
Not otherwise listed	366

TITLE 35: ENVIRONMENTAL PROTECTION SUBTITLE G: WASTE DISPOSAL CHAPTER I: POLLUTION CONTROL BOARD SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

PART 809

SPECIAL WASTE HAULING

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- 809.801 Compliance Date
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SUBPART I: HAZARDOUS (INFECTIOUS) HOSPITAL WASTE

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- 809.903 Rendering Innocuous by Sterilization
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- 809.905 Recordkeeping Requirements for Generators
- 809.906 Defense to Enforcement Action

Appendix A Old Rule Numbers Referenced

AUTHORITY: Implementing Sections 5, 10, 13 and 22 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111-1/2, pars. 1005, 1010, 1013, 1022, and 1027).

SOURCE: Adopted at 3 Ill. Reg. 13, p. 155, effective March 31, 1979; emergency amendment at 4 Ill. Reg. 34, p. 214, effective August 7, 1980 for a maximum of 150 days; emergency amendment at 5 Ill. Reg. 270, effective January 1, 1981 for a maximum of 150 days; amended at 5 Ill. Reg. 6384, effective May 28, 1981; amended at 5 Ill. Reg. 6378, effective May 31, 1981; codified at 7 Ill. Reg. 13640, effective September 30, 1983.; recodified from Subchapter h to Subchapter i at 8 Ill. Reg. 13198; amended in R89-13A at Ill. Reg. , effective

SUBPART A: GENERAL PROVISIONS

Section 809.103 Definitions

Unless the contrary is indicated, terms have the same meaning as in 35 Ill. Adm. Code 810. The following terms are specifically defined for use in this Part:

"Special Waste" -means any "hazardous waster" "industrial process waste" or "pollution control waster"-is as defined in 35 Ill. Adm. Code 808.110. Special waste may be either "class A" or "class B" pursuant to 35 Ill. Adm. Code 808.245.

SUBPART B: SPECIAL WASTE HAULING PERMITS

Section 809.211 Exemptions for Special Waste Haulers

The following persons need not obtain a special waste hauling permit or carry a manifest if they haul only the waste indicated:

- a) Any person licensed in accordance with the Private Sewage Disposal Licensing Act, Ill. Rev. Stat., - 1981; Ch:-1987, ch. 111-1/2, par. 116.301 et seq., and who hauls only septic tank pumpings-; need not obtain a special waste hauling permit or carry and complete a manifest under this Part-.
- b) Any person who hauls only livestock waste intended for land application pursuant to -Agency Guideline WPC-2 need not obtain a special waste hauling permit or carry and complete a manifest under this Part-35 Ill. Adm. Code 560.
- c) -Generators and h-Haulers of municipal water or wastewater treatment plant sludge which is to be applied to land and which is -to be -regulated under -35 ###. Adm: Code: Subtitle C pursuant to -a sludge management scheme approved by the Agency pursuant to 35 Ill. Adm. Code 309.208-need not obtain a special waste hauting permit or prepare; carry and complete a manifest under this Part for that studge-.
- d) Any person licensed in accordance with "An Act in relation to the Disposal of Dead Animals," Ill. Rev. Stat., -1981; Ch:-1987, ch. 8, par. 149.1 et seq., and who hauls only grease, meat packing scraps, dead animals and parts of animals for delivery to a renderer-; need not obtain a special waste hauling permit or carry and complete a manifest under this Part-.
- e) Any person operating under rules and regulations adopted pursuant to "An Act in relation to Oil, Gas, Coal and Other Surface and Underground Resources," Ill. Rev. Stat., -1981; Ch:-1987, ch. 96-1/2, par. 5401 et seq., and who hauls only oil and gas extraction wastes as defined -therein need not obtain a special waste hauling permit or carry and complete a manifest under this Partin that Act.
- f) Any person who hauls only radioactive wastes as defined by the Radiation Protection Act, Ill. Rev. Stat., -19817 Ch--1987, ch. 111-1/2, par. 211 et seq.-7 need not obtain a special waste hauling permit or carry and complete a manifest under this Part.-

- g) Any person holding a permit or certificate issued by the Illinois Commerce Commission or the Interstate Commerce Commission and who handles only shipments pursuant to a bill of lading in accordance with such Commission's regulations- need not obtain a special waste hauling permit or carry and complete a manifest under this Part-
- h) Any person who hauls only coal combustion fly ash-need not obtain a special waste hauling permit or carry and complete a manifest under this Part-.
- i) Any person who hauls only declassified waste or refuse.
- j) Any person who hauls only special waste exempted by 35 Ill. Adm. Code 808.123 (small quantity generators).

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(Source: Repealed Ill. Reg. effective)

SUBPART E: MANIFESTS, RECORDS AND REPORTING

- Section 809.501 Manifests, Records, Access to Records, and Reporting Requirements and Forms
 - a) Any person who delivers special waste to a permitted special waste hauler shall complete a manifest to accompany the special waste from delivery to the destination of the special waste. The manifest which shall be provided or prescribed by the Agency shall, as a minimum, contain the name of the generator of the special waste; when and where generated; name of the person from whom delivery is accepted and the name of the site from which delivered; the name of the special waste hauler; the date of delivery; the final disposal, storage or treatment site; and the name, <u>classification</u> and quantity of the special waste delivered to the hauler. The Agency may provide or prescribe a different form of manifest for Class A special wastes than for Class B special wastes.
 - b) The manifest shall consist of four parts, in contrasting colors, such that an entry or signature on one part will be directly reproduced upon all underlying parts. The top part of the manifest shall be signed by the person who delivers special waste to a special waste hauler, such signature acknowledging such delivery. The top part of the manifest shall also be signed by the special waste hauler, such signature acknowledging receipt of the special waste. The person who delivers special waste to a special waste of a special waste hauler shall send one copy of the manifest signed by the deliverer and the special waste hauler to the Agency within two working days and shall retain one copy the top part of the manifest as a

record. The remaining four copies three parts of the manifest shall accompany the special waste shipment. At the destination, the second part of the manifest shall be signed by the person who accepts special waste from a special waste hauler, such signature acknowledging acceptance of the special waste.

- c) A permitted site which receives special waste for disposal, storage or treatment of special waste must be designated on the manifest as the final destination point. Any subsequent delivery of the special waste or any portion or product thereof to a special waste hauler shall be conducted under a manifest initiated by the permitted disposal, storage or treatment site.
- d) In all cases, the special waste hauler shall deliver the third and fourth parts three copies of the complete, signed manifest to the person who accepts delivery of special waste from the hauler. The special waste hauler shall retain the second part one copy of the completed, signed manifest as a record of delivery to a permitted disposal, storage or treatment site. In addition, at the end of each month, or such longer period of time approved by the Agency, the owner and the operator of the permitted disposal, storage or treatment site who accepts special waste from a special waste hauler shall submit a copy of each completed; signed manifest receivied during that period to the Agency, and shall send the fourth part one copy of the completed manifest to the person who delivered the special waste to the special waste hauler.
- e) Every person who delivers special waste to a special waste hauler, every person who accepts special waste from a special waste hauler and every special waste hauler shall retain a copy their respective parts of the special waste manifest as a record of all special waste transactions. These copies parts shall be retained for three years and shall be made available at reasonable times for inspection and photocopying by the Agency.
- f) Every person who delivers Class A special waste to a special waste hauler, and every person who accepts Class A special waste from a special waste hauler shall file a report, on forms prescribed or provided by the Agency, summarizing all such activity during the preceding calendar quarter. Such reports shall, at a minimum, include the information specified in subsections (h) and (i) of this Section and be filed no later than the tenth day of the month following the end of the calendar quarter. This subsection shall be applicable to all Class A special wastes which are delivered to a special waste hauler on or after January 1, 1990.

- g) Every person who delivers Class B special waste to a special waste hauler, and every person who accepts Class B special waste from a special waste hauler shall file a report, on forms prescribed or provided by the Agency, summarizing all such activity during the preceding calendar year. Such reports shall, at a minimum include the information specified in subsection (h) of this Section and shall be filed no later than March 1 of the following year. This subsection shall be applicable to all Class B special wastes which are delivered to a special waste hauler on or after January 1, 1990.
- h) Every quarterly or annual report required to be filed with the Agency by a generator pursuant to subsection (f) or (g) of this Section shall include the following:
 - 1) The IEPA identification number, name and address of the generator;
 - 2) The period (calendar quarter or year) covered by the report;
 - 3) The IEPA identification number, name and address for each off-site treatment, storage or disposal facility in the United States to which waste was shipped during the period;
 - 4) The name and IEPA identification number of each transporter used during the period for shipments to a treatment, storage or disposal facility within the United States;
 - 5) The IEPA supplemental permit identification number issued for the wastestream shipped off-site; and
 - 6) A certification signed by the generator or the generator's authorized representative.
 - i) Every quarterly or annual report required to be filed with the Agency by a person accepting special waste from a waste hauler pursuant to subsection (f) or (g) of this Section shall include the following information:
 - <u>a)</u> The IEPA identification number, name and address of the facility;
 - b) The period (calendar quarter or year) covered by the report;
 - <u>c)</u> For off-site facilities, the IEPA identification number of each hazardous waste generator from which the facility received a non-hazardous special waste during the period; for imported shipments, the

report must give the name and address of the foreign generator;

- <u>d)</u> A description and the quantity of each nonhazardous special waste the facility received from off-site during the period. This information must be listed by IEPA identification number of each generator;
- e) The method of treatment, storage or disposal for each non-hazardous special waste; and
- f) A certification signed by the owner or operator of the facility or the owner or operator's authorized representataive.

IT IS SO ORDERED.

Board Members J. Dumelle and B. Forcade dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Interim Opinion and Order was adopted on the $\cancel{84}$ day of $\cancel{4}$ and $\cancel{6}$, 1989, by a vote of $\cancel{2}$.

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Dorothy M. Gunn, Clerk Illinois Pollution Control Board

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Dissenting Opinion was filed on the <u>3777</u> day of <u>Actober</u>, 1989. <u>Marathy M. Gunn, Clerk,</u> Illinois Pollution Control Board