ILLINOIS POLLUTION CONTROL BOARD
August 9, 1990

IN THE MATTER OF:	)	
	)	R89-13(A)
IDENR SPECIAL WASTE CATEGORIZATION	)	(Rulemaking)
	)	

ADOPTED RULE. FINAL ORDER.

OPINION OF THE BOARD (by J. Anderson):

This rulemaking creates 35 Ill. Adm. Code 808, Special Waste Categorizations, and amends 35 Ill. Adm. Code 809, Special Waste Hauling. It narrowly modifies the effect of 35 Ill. Adm. Code 807, Solid Waste. The Board adopted Part 807 as "Chapter VII" in R72-5, 8 PCB 575 & 695, July 19 and 31, 1973. The Board adopted Part 809 as "Chapter IX" in R76-10, 33 PCB 131, March 15, 1979. Part 807 is the subject of a proposal in R88-7, Landfill Regulations, which is presently pending in Second Notice. The rules in this Docket do not assume that the Board will adopt certain features of the proposal in R88-7, but the present rules in this docket are flexible enough to accommodate the R88-7 features should they be adopted.

Due to the length of the rules and this Opinion, the Board incorporated the text of the amendments into a separate, accompanying Order of this same date.

STATUTORY FRAMEWORK

This rulemaking implements Sections 22.01 and 22.9 of the Act, which were adopted at different times.

Section 22.01 of the Act, as amended, requires the Board to review and consider the repeal of the manifesting requirement for non-hazardous special waste, 35 Ill. Adm. Code 809.Subpart E, by December 1, 1989. However, this Section also requires the Board to adopt an annual report requirement for facilities receiving non-hazardous special wastes.

Section 22.9(a) of the Act requires the Department of Energy and Natural Resources (DENR) to complete a study by July 1, 1985 on the benefits and feasibility of establishing a system for classifying and regulating special wastes according to their degree of hazard. Section 22.9(b) requires the Board to adopt, following completion of the DENR study, but no later than December 1, 1990, regulations that establish standards and criteria for classifying special wastes according to their degree of hazard or by an alternative method.

The substantive provisions of Section 22.9 include further requirements and guidelines on special waste classification. Section 22.9(c) requires the Board to adopt regulations

establishing standards and criteria by which the Agency may determine that a waste or class of waste is not a special waste. Section 22.9(d) contains a temporary statutory standard by which the Agency makes this decision pending adoption of Board regulations. Section 22.9(e) provides that, if the Agency fails to act on a determination within 60 days, the requestor may seek review before the Board as if the Agency had denied a permit. Finally, Section 22.9(f) provides that the determination that a waste is not a special waste does not apply to hazardous waste. This precludes the declassification of special wastes that are RCRA hazardous wastes (i.e., wastes that are hazardous under state regulations identical in substance to federal regulations adopted pursuant to the Resources Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6901 et seq., pursuant to Section 22.4(a)) or waste deemed hazardous wastes under independent State law and regulations (pursuant to Section 22.4(b) and (c)).

PROCEDURAL HISTORY AND RECORD OF THE PROCEEDING

This proceeding grows out of two prior proceedings and includes the records of those proceedings. The Board closed docket R84-43, Non-Hazardous Special Waste Manifests, and incorporated its record into docket R85-27, Special Waste Categorization Study, on December 17, 1987. The Board opened this proceeding when it closed docket R85-27 on August 10, 1989 and incorporated its consolidated record into this docket. The present record includes approximately four years of exhibits, hearings and the draft regulatory proposal by STS from R85-27, including the record from Docket R84-43.

The Board has since gained the further benefit of additional hearings, exhibits, and comments under the present docket number. The Board proposed the present rules for First Notice on August 10, 1989. The First Notices appeared at 13 Ill. Reg. 13468, August 25, 1989 (Part 808), and 13 Ill. Reg. 13699, September 1, 1989 (Part 809). The Board proposed an Interim Request for Public Comment on October 18, 1989 relating to changes in the text of the proposed rules. On November 15, 1989, the Board proposed the rules for Second Notice, and the Joint Committee on Administrative Rules (JCAR) received the complete Second Notice package on June 1, 1990. JCAR submitted its Certificates of No Objection on July 26, 1990.

The history of developments regarding special wastes reflects the interconnection among diverse, independent concerns. These concerns include the perceived need for relief from regulatory requirements (e.g., manifesting) for a potentially significant proportion of the universe of "special waste" (as defined by Section 3.45 of the Act), the desire to classify special wastes to assure handling appropriate to their characteristics, the obligation to maintain a State system that is consistent with federal law, including RCRA, see Section

20(a)(7)-(a)(9), and the pending efforts to update all solid waste rules in R84-17/R88-7.

Sections 22.01 and 22.9 of the Act reflect these diverse concerns. Section 22.01, added by Public Act 83-1461 and effective September 17, 1984, was the culmination of compromises that altered the original proposal, H.B. 3042. H.B. 3042 would have immediately required the Board to drop all manifest requirements for non-hazardous special wastes. As enacted, Section 22.01 only requires the Board to "review and consider" such action by January 1, 1986.

Section 22.9, traces its roots to a different enactment, Public Act 83-1268, effective January 1, 1985, and relates to regulation of special wastes based on their degree of hazard. This Section requires DENR to complete a study of the "benefits and feasibility" of establishing a degree of hazard classification system for special waste regulation by July 1, 1985. Section 22.9(a). It requires the Board to promulgate regulations for classifying and declassifying waste by September 1, 1988. Sections 22.9(b) & (c). The General Assembly subsequently changed this deadline to December 1, 1989, in Public Act 85-1327, effective August 31, 1988, and to December 1, 1990, in Public Act 86-958, effective December 5, 1989.

In response to the mandate of Section 22.01, the Board opened R84-43 on December 20, 1984, for review and consideration of the manifest requirement. The Board held two inquiry hearings in March 1985.

From the beginning of the R84-43 proceeding, the Board noted the DENR mandate imposed by Section 22.9. The Board observed in its Order of December 20, 1984 that the DENR study due July 1, 1985 would become the subject of other Board hearings and that this study "will undoubtedly provide a useful data base for consideration in this docket and will be made a part of the record in this proceeding." December 20, 1984 Order at 2.

The Board received the Section 22.9 DENR report on November 21, 1985.[1] By its Order of the same date, the Board established Docket R85-27. One month later, on December 20, 1985, the Board, having considered the testimony and exhibits submitted in R84-43, entered an order finding that "it would be imprudent to repeal the manifest requirement at this time and that further deliberation should proceed under a consolidated R84-43/R85-27 Docket." Order of December 20, 1985 at 1. It also proposed a rule for First Notice that would have required annual reports

---

[1] K. Reddy, Special Waste Categorization Study (DENR HWRIC RR 005 October 1985).

from all facilities accepting non-hazardous special wastes, effective July 1, 1987, without attempting to define the affected universe of facilities.

Ironically, on the same day, Public Act 84-1108 became effective. That law directed DENR to prepare another report for the completion of a study on the degree of hazard of industrial wastes. The Board received this second DENR report on January 22, 1987.[2] Upon receipt of this report, the Board scheduled and held two hearings in May 1987. After considering the testimony and comments produced in the consolidated R84-43/R85-27 docket, the Board dismissed its First Notice proposal on December 17, 1987, and further formally dismissed and closed Docket R84-43.

On April 7, 1988, the Board entered an Interim Order directing the Board's Scientific and Technical Section (STS) to prepare a regulatory proposal. The Board contemplated in the Order that the final installment of the DENR "degree of hazard" studies, which the Board expected to be delivered "shortly," would aid the STS efforts. To serve as an independent proponent, the Interim Order established an arrangement consistent with RES 86-1, whereby the STS became a separate entity, subjected to customary ex parte restrictions as a proponent. This arrangement has since prevailed throughout this proceeding.

The Board received DENR's third installment on October 27, 1988.[3] By its cover letter, the DENR's Hazardous Waste Research and Information Center (HWRIC) indicated that it would likely submit one additional report, "The Characterization of Non-RCRA Special Waste" by William W. Frerichs, within two weeks.

HWRIC published the Frerichs report in January 1989, but did not submit it to the Board for filing in Docket R85-27. The Board otherwise obtained a copy of that report on April 28, 1989. The cover letter accompanying the report indicated that the Frerichs report was a product of DENR's continuing research mission and that DENR did not intend to file it as an exhibit in the R85-27 proceeding.

Working on the basis of selected preliminary drafts, STS staff prepared a rough draft regulatory proposal and "supporting document." STS prepared a second draft of its proposal on June 28, 1989 and filed a third draft on July 24, 1989. STS filed an

---

[2] M. Plewa & R. Minear, Assigning a Degree of Hazard Ranking to Illinois Waste Streams (DENR HWRIC RR 005 November 1986).

[3] J. Plewa, R. Minear, D. Ades-McInerney & E. Wagner, Refining the Degree of Hazard Ranking Methodology for Illinois Industrial Waste Streams (DENR HWRIC RR-029 September 1988).

accompanying "Supporting Document" on July 26, 1989. Noting the imminent statutory deadline and the effort already underway to develop this Board proposal, STS filed a Statement Of The Scientific and Technical Section Regarding Submission of Documents on July 31, 1989. STS indicated that additional efforts to develop a formal proposal appeared unnecessary in R85-27, since that Docket was soon to close.

The STS draft proposal filed July 24, 1989 became the cornerstone of the present proceeding. It is based on the STS review of the DENR/HWRIC studies, and has become the regulatory proposal in this docket. The following discussions of Board actions in this proceeding focus on the Board's reception of this draft proposal.

FIRST NOTICE PROPOSAL AND CREATION OF DOCKETS A AND B

The August 10, 1989 First Notice proposal did not address all the potential ramifications of a waste classification system, particularly those thorny issues related to creation of a "high hazard" non-RCRA special waste category (i.e., those special wastes assigned a score of 3 pursuant to Section 808.245). As the foregoing history discloses, the legislature originally anticipated that the Board would have the benefit of 38 months to deliberate and refine a proposal following receipt of the DENR study (July 1, 1985 to September 1, 1988); the Board had far less time than that to develop its First Notice proposal. Therefore, it was appropriate that the Board set aside a docket to consider possible further refinements of the degree of hazard ranking system, as well as to consider possible utilization of that system to impose heightened controls on waste treatment, storage and disposal of "high hazard" non-RCRA special wastes. The First Notice proposal had, as its limited primary purpose, utilization of the DENR's hazard ranking system for determining which wastes may be declassified entirely and which of the remainder may have reduced manifest requirements. It was possible that further refinements would alter the hazard ranking system and related requirements, to increase the potential universe of declassified wastes, as well as to specify waste treatment, storage, and disposal modalities tailored to specific classes of wastes.

To accommodate these purposes, the Board established two separate dockets in this proceeding. The August 10, 1989 First Notice proposal, which culminated in today's adopted rule, with its limited focus and timetable, was the subject of Docket A. Consideration of refinements to the hazard ranking system and the possible use of that system to prescribe requirements specific to special waste classes, including those non-RCRA wastes assigned the highest hazard ranking, is the subject of Docket B.

First Notice Statement of Reasons

As the foregoing history indicates, the First Notice proposal followed almost 5 years of efforts by the DENR, the Board, and STS. Unfortunately, those efforts only began to coalesce after long effort, and the Board found itself confronting an extremely short time frame in which to attempt to meet the statutory deadline for rulemaking. At that time the deadline for Board action was December 1, 1989.

The First Notice proposal was based on the first three DENR studies as well as the STS draft proposal. There was insufficient time to allow STS to prepare and submit a formal final proposal, as originally contemplated by the Board in its Interim Order of April 7, 1989.

The principal differences between the STS draft and the First Notice proposal Board proposal were the deletion of certain features of the STS draft. The Board rewrote very little of the draft STS proposal, except as necessary to elimination of those features.

First Notice Departures from the STS-Proposed Draft Rule

1. Deletion of Computer Program Certification "Loop" (Subpart I, Sections 808.500 through 808.511 of STS draft)

The Board First Notice proposal did not retain this feature, although it specifically authorized the use of computers in making "degree of hazard" determinations (Section 808.301), applications (Section 808.430(a), Board Note), and requests for additional data (Section 808.430(b), Board Note). The Board draft also retained the essential elements of the "data base" provisions, from STS draft Section 808.511, at Section 808.302, but dropped the references to computer on-line data bases and computer operators.

The STS draft provisions for Agency certification of computer programs were deleted as unnecessary and potentially beyond the authority of the Board and the Agency. The Board believed it unnecessary for the purposes of the Act to require use of a computer or to otherwise specifically purport to regulate such use. This was because an application for reclassification of a special waste does not need a computer to achieve correct results. Second, the Board felt that Agency certification of computer programs arguably amounts to a form of licensing not authorized by the Act. Finally, there is no suggestion that the Agency seeks such a role or possesses the resources to perform that role.

2. Deletion of a Separate Declassification "Loop" (Subpart D, Sections 808.280 through 808.282 of STS draft)

The First Notice proposal introduced a "seamless" process through which the base determination as to classification (under Section 808.245) may directly result in declassification. The STS draft would have required generators to file a second application for classification if their waste qualified as lowest degree of hazard special waste. The STS draft stated that "because the requirements for management of a Type A special waste are virtually the same as for waste which is not a special waste, the Subpart leaves the election of declassification to the generator." The First Notice proposal simply eliminated these overlapping categories of wastes and redundant application processes.

3. Deletion of a Hazardous Waste Category Outside RCRA (Sections 808.300, 808.302 and 808.307(b)(4))

Although the "Board Note" following Section 808.302 of the STS draft would have suggested that a "hazardous waste" means a RCRA waste as defined in 35 Ill. Adm. Code 721, it is clear from the operation of Section 808.307(b)(4) that some wastes not presently classified as hazardous under RCRA could fall into the Type D category under the STS proposal. This could cause controversy and confusion and is at odds with the evident intent of Sections 22.01 and 22.9: to provide regulatory relief from overly-onerous requirements for those wastestreams that do not warrant the full panoply of controls currently imposed on special wastes (e.g., 6-part manifests). However, the Board draft retains the DENR/STS scoring system intact, allowing for future rules adopted under Section 22.4(b) and (c), rather than under Sections 22.01 and 22.9. This scoring system could impose a "hazardous" classification on those special waste streams assigned a score of 3.

4. Elimination of Mandatory Application for Wastestream Identification Number (Section 808.101(b) of STS draft) and Agency Classification of Type D Wastes on Request (Section 808.301 of STS draft)

The First Notice proposal (Section 808.241) and STS draft (Section 808.303) shared the common feature that a special waste is a high-order special waste subject to the 6-part manifest and other more stringent requirements unless proven otherwise. However, the First Notice proposal eliminated the requirement that all special waste generators must apply for a wastestream identification number. It also eliminated the somewhat related provision (Section 808.301) that would have allowed the Agency to classify any waste as a hazardous waste at the request of the generator. Under the First Notice proposal, the generator of Class B special waste could choose to subject its wastes to the

Class A manifest requirement. If it so chose, its wastes were "deemed" Class A special wastes for all purposes of Part 808 (Section 808.122(b)).

The primary rationale for departing from the STS draft in this regard was to avoid placing the Agency in the potential role of a "rubber stamp" for generators seeking the higher-order classification for their wastes. There appeared no reason to needlessly involve the Agency in what is essentially a business decision, thereby creating a new administrative burden.

5. Elimination of the "Informational Application" (Sections 808.100(c) and 808.121, Board Note)

The STS draft would have entitled "any person" to apply to the Agency for a written determination as to the classification of "any waste," presumably including RCRA hazardous wastes and ordinary household refuse. Such a requirement would potentially impose a burden on the Agency unrelated to the purposes of this rulemaking. It could potentially make the Agency an unwilling player in disputes between USEPA and generators seeking delisting of hazardous wastes, as well as in litigation involving attempts by third parties to have an unlisted waste added to the USEPA's hazardous waste lists.

6. Deletion of Agency Rulemaking Prescribing Additional Information Required in Classification Application (Section 808.402(i) of the STS draft)

The First Notice draft would have enabled the Agency to request additional information as needed on a case-by-case basis (as would the STS draft), but it did not allow the Agency to prescribe rules specifying such additional requirements. Such rulemaking appears the proper function of the Board. Further, the Act does not authorize such rulemaking by the Agency.

7. Deletion of Provisions Allowing Description of the Waste Stream in Question to be Modified and Different From The Chemical and Physical Analysis for that Wastestream (Section 808.413(b) of the STS draft)

The First Notice draft would have avoided the implications inherent in allowing modification of a wastestream description notwithstanding the physical and chemical analysis submitted for that wastestream. In its place, the First Notice draft modified the language of STS Section 808.413(b) and the accompanying "Board Note." A related change was the addition of a "Board Note" following 808.413(a). Under the First Notice draft, each variation of a wastestream need not have precisely matched the chemical and physical analysis provided for that wastestream, so long as the description of the wastestream was expressed as a range of properties associated with the particular generating

process. This outcome appeared to meet the need for flexibility, which the STS draft attempted to address, without inviting or requiring the applicant to "modify" the description every time. For example, a generator of waste paint solvent could file a single analysis and description for its wastestream to accommodate changes in pigment color and concentration associated with different customers or finished product lines.

8. Deletion of the "Preponderance" Standard for Agency Decisions (Section 808.503(c) of the STS draft)

The enunciation of a "preponderance" standard appeared inappropriate for Agency determinations that are not made on a record review like Board decisions. The "preponderance" test relates to the relative weight that the evidence in a contested case record must bear to upset an agency judgment on review. Where there is no such contested case record, the "preponderance" test (or the "manifest weight" test that applies to Board decisions) is inapplicable. The appropriate "test" for Board review of a non-record Agency decision is simply whether the Agency decision was correct. Note that the "record" before the Agency in a permit matter is not a "record" in the same sense as is used in review of decisions in contested case proceedings.

9. Elimination of Opportunity for Applicants to Introduce New Information in a Request for Reconsideration (Section 808.541(a) of the STS draft)

While the First Notice draft retained the "request for (Agency) reconsideration" mechanism, it would not have allowed such requests to include new information. The concern was that allowing new information on reconsideration could have created a never-ending application process, improperly relieving applicants of their responsibility to provide a complete application to the Agency at the outset of the process. Such an approach would also encourage submission of "minimalist" applications by applicants who are reluctant to divulge all relevant information in their possession.

10. Omission of Provisions Governing Applications for Wastestream Identification Numbers (Subpart B, Sections 808.200 through 808.220 of the STS draft)

The First Notice draft would have allowed for inclusion of STS proposal provisions governing wastestream I.D. numbers (by leaving a "gap" in the draft regulations at 808.200 et seq.), but it did not expressly include these provisions. First, reliance on such wastestream I.D. numbers appeared predicated on adoption of R88-7's proposed revisions to the solid waste regulations. The Board has not adopted the R88-7 rules as of the final action on this rulemaking. Second, the Board may choose to relocate the waste stream I.D. number application process provisions elsewhere

than in Part 808, since such applications would not necessarily involve the waste classification process.

11. Elimination of Distinctions Between "Waste" and "Wastestream" and Associated Requirements (Section 808.110 and following Board Note of the STS draft)

The STS proposal would have required a wastestream I.D. number only for "wastestreams" (i.e., wastes routinely or periodically produced by a given process); individual (non-repetitive) waste loads are tracked pursuant to an "unmanifested waste report" from the waste receiving facility (per Section 808.411, page 52 of the STS draft, recommended for adoption in R88-7). The First Notice draft retained verbatim the "unmanifested waste report" feature at Section 809.502 but eliminated the distinction between "wastes" and "wastestreams" as outside the scope of this rulemaking, as potentially confusing, and as inconsistent with the Act.

Conclusion re Proposed First Notice and the STS-Proposed Draft

The Board emphasizes that the rationale set forth in the draft STS for specific recommendations filed July 26, 1989 with the Board in R85-27 were endorsed by neither STS (since such recommendations were in draft form only) nor the Board. However, for purposes of eliciting comment during the First Notice period, and to the extent the Board retained specific provisions in the First Notice draft, The Board offered the STS rationale as explanation and justification.

RESPONSES TO INTERIM REQUEST FOR PUBLIC COMMENT

After 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. The Board cancelled a third hearing, scheduled for September 15, after no one appeared to present testimony or examine witnesses. The Department of Energy and Natural Resources (DENR), including its Hazardous Waste Resource and Information Center (HWRIC); 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 prepared the STS draft regulatory proposal upon which the Board based many features of the First Notice proposal, each presented testimony. The Board received prefiled comments and questions from the National Renderer's Association and Waste Management of Illinois.

By its Interim Request for Public Comment dated October 18, 1989, the Board sought public comment regarding changes to the proposed rules. The Board effected those changes in response to

comments received during this First Notice period. The Board thereby gave interested persons an opportunity to comment on those changes prior to adopting a Second Notice Opinion and Order.

The draft Opinion and Order accompanying the October 18, 1989 Interim Request contained a number of modifications based on the hearing testimony and public comments received as of that date. Generally, the Board re-crafted its draft for the following reasons:

1. to clarify that the Board intended the toxicity ranking methodology developed by DENR/HWRIC to supplement the present Agency system of evaluation, not to replace it;

2. to include other considerations derived from the Agency's present policy paper;

3. to utilize the DENR/HWRIC degree of hazard categories for which a developed scientific rationale existed (i.e., toxicity), but to rely on the existing Agency evaluation system rather than the DENR/HWRIC rankings based on a "legal" rationale (e.g., pH);

4. to provide for a four-part manifest system plus quarterly or annual reports;

5. to remove amendatory language not directly related to the DENR/HWRIC classification system, including leaving intact the Board's existing hazardous (infectious) hospital waste regulations; and

6. to provide for a re-evaluation within two years for those wastes that the Agency earlier determined were not 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 First Notice proposal. See, e.g., R. 19-21 (testimony of Dr. David Miller). These witnesses also defended the HWRIC studies' choice of methodology, the "break points" for hazard ranking chosen by HWRIC, and the toxicological data and reference compound selected by HWRIC and proposed by the Board (i.e., copper sulfate). See, e.g., R. 21-27 (testimony of Dr. Michael Plewa). The witnesses for HWRIC and DENR stated that the computerized system was then presently "up and running" and available for use on all wastes, so long as the applicant provided adequate information on the waste components

to the Agency or if such information was already part of the data base. R. 42-44.

The DENR and HWRIC witnesses felt that the system was conservative enough to avoid error for declassification purposes. Further, DENR/HWRIC stated that because the system was conservative, it is possible that more specific information on constituents and toxicities would lower the toxicity level classification of a waste given a high-hazard ranking. P.C. # 4. Therefore, the conservatism of the system would cause uncertainty and error to fall in favor of higher toxicity rankings.

The DENR and HWRIC witnesses also made clear that the degree of hazard system should be viewed as a potential degree of hazard system. It should act as only one element within the overall evaluation by which the Agency would make a determination, and that the ranking could adjust up or down, depending on the appropriate modes of treatment or disposal of special wastes. E.g., R. 57-59.

The DENR and HWRIC witnesses also acknowledged that they did not base a number of their rankings on the scientific rationale they developed. Rather, the witnesses utilized a "legal" rationale: they borrowed a regulatory standard applicable to some potential characteristic of those wastes from an unrelated federal or state regulatory program, such as the federal RCRA standard for pH, and established a "break point" without refinement or incremental adjustment based on the degree of hazard system. R. 61, 68 & 71-73.

The DENR and HWRIC witnesses also testified that the system's database and application program is potentially useful as a planning device. 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. The witnesses noted that the system could be applied manually.

In any event, DENR/HWRIC argued for a universal state data base system (presumably maintained by the Agency), thus letting all interested persons know the ground rules. R. 47 & 52 & P.C. #4. They also noted that experts should screen new data in order to maintain a standardized system and thus avoid delisting evaluations by those lacking 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 from the Agency at hearing concerning the HWRIC ranking methodology and proposal. Mr. James

O'Brien, Manager of the Agency's Office of Chemical Safety (OCS), questioned the exclusive use of equivalent oral doses, when the inhalation or dermal exposure route might be more appropriate. DENR/HWRIC responded that the toxicity weighting table on Page 11 in the Plewa 1988 report takes this into account. Responding to Mr. O'Brien's concerns about lack of consideration of sub-acute or systemic chronic toxicity, DENR/HWRIC stated that relatively little data exists in this regard. Further DENR/HWRIC felt that such values would have little effect anyway because the system is conservative. Regarding Mr. O'Brien's comments on the appropriateness of test methods, DENR/HWRIC responded that the questioned parameters, such as pH for solid samples, are difficult to measure; the generator could either leave these parameters blank or analyze a water slurry. DENR/HWRIC asserted that the Agency needs to consider the use of these values in its final determination of waste stream status. R. 112-119 & Ex. 4.

Others present at hearing also asked questions. 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, see Section 808.App. B(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.

Other Questions and Comments at Hearing

The National Renderers Association argued in its pre-filed questions that licensed renderers, who are currently exempted 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. Ex. 7. Several commenters endorsed this view. P.C. # 10, 11 & 14. The Agency also acknowledged that it rarely, and then only informally, utilizes the OCS to assist in the toxicity evaluation components of its guidance document. R. 102, 147, 163 & 169-170.

One questioner, and two commenters representing the Illinois

Steel Group and the Illinois Environmental Regulatory Group (IERG), P.C. # 10, 11 & 14, suggested that DENR had failed to provide a copy of the computer program developed by DENR/HWRIC on request. They contended that this refusal had denied them access to data in order to meaningfully testify on or evaluate that system. Accordingly, they urged the Board to take no action based on the DENR system. DENR/HWRIC responded that they had offered those with specifics on their waste stream "to come to our offices" to run the degree of hazard, P.C. #4, p. 5. DENR/HWRIC did not release the system because they didn't want others modifying the program, especially during its developmental phase. Download of the program onto a diskette was possible as of the date of the Interim Requester. DENR and HWRIC want to assure that there is only one state system, so they want to assure that the presently-existing system is secure. R. 215-216 & P.C. # 4.

Public Comments

The Board received post-hearing comments from the Metropolitan Water Reclamation District of Greater Chicago (P.C. #3); DENR (P.C. # 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 & 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).[4]

Comments 4 and 16 were 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 Agency and DENR advised the Hearing Officer that they were coordinating to provide at least a partial response to the fourth question raised by the Hearing Officer in his September 12, 1989 order. That was a request that DENR run its degree of hazard (DOH) analysis on the requests that the Agency has already received and handled under its interim guidance policies over the past 2½ years. Such a "cross check" could serve to either confirm or deny claims relating to whether the system is practicable. It could provide a comparison of results from use of the DENR system alone with results from use of the Agency's policy guidance alone.

---

[4] Comments of a technical nature relating to the form of the rules for purposes of publication in the Illinois Register were also received from Mimi Griffiths, Administrative Code Division, Office of the Secretary of State (P.C. #2).

Mr. Frank E. Dalton, General Superintendent of the Metropolitan Water Reclamation District of Greater Chicago, P.C. #3, suggested that the Board add a Section 808.247 that would exempt municipal wastewater treatment plant sludge from classification as a special waste. He also urged that the Board revise Section 809.255 to clarify 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. BFI Waste Systems, P.C. # 9, pp. 3 & 4, and Waste Management of Illinois (WMI), P.C. # 1, p. 13, made somewhat similar suggestions.

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" on 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 & 11. The Agency typed this burden on its resources as growing rapidly and quantified it as 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 with which it suggests augmenting the four-part manifest requirement.

WMI submitted the greatest number of pre-hearing comments and questions relating to the proposal. P.C. # 1. Many of these questions and comments related to typographical errors and omissions, all of which the Board duly noted.

Substantively, WMI suggested that waste treaters and disposers should have a role in the classification process as of right, in light of their obvious stake in classification determinations, as well as their knowledge of actual conditions. P.C. # 1, pp. 1-2. WMI recommended that the Agency provide notice of pending classification requests to such receiving sites, and that the rules entitle such sites to participate in Agency classification proceedings. See, e.g., R. 259-260 & P.C. #1, p. 5.

WMI also noted that numerous sections of the proposal (e.g., proposed section 808.121(c)(1)) reference concepts embodied in sections or Parts not yet in existence, most notably Part 811. See R. 264-266, 326, 329-330 & 345-348. As noted by the Hearing Officer at hearing, R. 264-266, the Board drafted these sections, as well as those of proposed Part 809 that would establish substantive requirements for waste haulers, including haulers of wastes other than special wastes (e.g., Sections 809.221 through

809.227), with the expectation that the Board would earlier adopt the proposed landfill rules in R88-7. Such prior adoption has not occurred.

Finally, WMI noted several problems with the Infectious Hospital Waste rules as recodified from Subpart I of Part 809 to proposed Section 808.601, R. 322-329, with the addition of several new substantive requirements in Part 809 for waste haulers. These included requirements for overnight parking and covers on waste trucks.

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, submitted the largest number of post-hearing comments. P.C. # 5, 6, 7, 8, 10, 12, 13 & 14. All these commenters stated that such slags are fully utilized as products, such as railroad ballast, as 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. # 11 & 16. Some commenters also observed that the DOH methodology may not always be applicable or practicable. P.C. # 11, 15 & 16. These 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 & 16. Dr. Schaeffer recommended a bioassay-based approach that he has developed in a study undertaken for DENR which he asserts is easily implemented and made capable of gauging 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 the Board define "cover," although at hearing two participants suggested that covers might be impractical, unnecessary, or even detrimental in some cases. R. 345-353 & 388-389.

Board Conclusions and Responses to First Notice Public Comments

In its October 18, 1989 Interim Request, and again in the November 15, 1989 Second Notice order, the Board emphasized that the purpose and effect of the proposed rulemaking did 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 appeared that such slags are properly defined as products unless

abandoned or discarded, and to that extent they are unaffected by the proposed rules. In light of the several comments suggesting that some persons misunderstood this fact, the Board inserted a clarifying sentence in Section 808.100(a).

After consideration of the several comments and questions and the testimony at hearing, the Board made several substantive changes in the proposed rule. It was clear, as many participants had noted, that the Board must drop references to certain provisions and concepts from this rulemaking in view of the fact that the proposed rules in R88-7 will not become effective prior to this proceeding. In consequence of this reality, the Board deleted all present references to Part 811 and all substantive requirements in the proposed amendments to Part 809 that are not directly related to special waste classification (e.g., proposed Sections 809.221 through 809.227).

Similarly, the Board deferred the First Notice-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. These wastes were not newly evaluated by DENR's methodology. This deferral also accommodated the need for separate consideration of the hazardous (infectious) hospital waste rules. Finally, the ongoing legislative initiatives regarding "medical waste" would affect infectious wastes generally, and the Board believed that this militated against taking any new actions in this proceeding.

As for the DENR/HWRIC classification system, the Board concluded that this should serve as a component of a system for classification of special waste wastestreams. The Board clearly did not intend this as a means of classifying wastestreams in and of itself. It was also clearly a system that is to some extent volume-dependent. Moreover, the Board did not utilize that part of the HWRIC ranking system not justified by its science-based methodology. Rather, the Board relied on 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 they are not necessarily appropriate for or pertinent to the toxicity-based ranking in this rulemaking. Accordingly, the Board discarded Appendices C and D of Part 808 for the time being.

Although, as of the date of the Interim Request the Board awaited the results of a spot check of DENR's methodology on wastestreams previously submitted to the Agency for declassification under Section 22.9(d) of the Act, it was not persuaded by the concerns about adopting the rules before the commentors could test the computerized degree of hazard 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.

The commentors could have otherwise tested the system manually. In any event, the Board did not believe that it should hold these rules in abeyance for these reasons.

Moreover, the Board found that the concepts embodied in the Agency's current policy guidance document provide some basis for a comprehensive system, although they lack the discipline imposed by use of a formal ranking system, such as that 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. Without regular use of a central body of information, such as OCS, there is little assurance that determinations are consistent and based on current data. The Board did not find persuasive the Agency's assertions that inclusion of the proposed formal system of evaluation is unnecessary and that the computerized system envisioned by HWRIC would prove too onerous to use.

On the other hand, as to the concerns over the applicability and volume-dependent measure of toxicity provided by Appendix B, the Board intended that the proposed Section 808.245 language would clarify that an applicant may demonstrate the system 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 an articulated system provides a benchmark for evaluating disputes. Further, where waste volume is a factor in a lowered toxic score or classification, new Section 808.245(f) requires that the Agency specify such factor in its determination (also see the new language in subsection (b) of Appendix B).

The Board was not convinced of the propriety of requiring that waste treaters or disposers be brought into the classification process as active participants. In the Board's opinion, the proper role of operators of such facilities is to assure that wastes received are as described, not to participate at the Agency level in the classification process. Moreover, practical considerations render involving the entire universe of potential destinations of a given wastestream infeasible.

The Board partially agreed with the comments from the Metropolitan Water Reclamation District of Greater Chicago. While the Board did not agree that all water or wastewater treatment sludges should be exempt from the definition of "special wastes," it did agree that such sludges already regulated under an Agency-approved sludge management plan should be exempt from the special waste manufacturing and hauling requirements. The Board added Section 808.121(b)(4) to this effect.

The record persuaded the Board that the Agency is correct in asserting that information gathering 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. USEPA requires only a four-part manifest for RCRA hazardous wastes. In neither the record of this docket nor in its predecessor dockets, R84-43 and R85-27, neither the Agency nor any member of the regulated community has ever suggested that burying the Agency under an avalanche of manifest forms serves a necessary function. Ultimately, the Agency seldom, if ever, timely uses the manifests due to their sheer volume. The Board agrees with the concerns of DENR and others that if the Agency were 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 added subsections (h) and (i) to Section 809.501.

However, the Board did not believe that annual reporting provides an adequate measure of control over those wastes ranked as having a high degree of potential hazard. Hence, the proposed Interim Request rules required quarterly reporting for Class A wastes. The rules required annual reporting for all Class B wastes. Consequently, the Board continued to distinguish between special wastes that pose a high degree of hazard and those that do not.

One related change was that the proposed rules group together wastes posing a "moderate" degree of hazard (i.e., those which achieve a score of 2 under the system) with those posing a low degree of hazard as Class B special wastes. The Board made this revision rather than considering those posing a "Moderate" degree of hazard as Class A special wastes, as previously proposed.

Incorporation of Agency Policy

The Board altered the language of Part 808 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. However, the casual reader would have had difficulty finding the Agency's existing guidance policy in the Interim Request proposal because the Board attempted to distill that policy into basic elements before blending it into the rules.

The Agency's guidance policy was set forth in the November 1986 memorandum to solid waste generators entitled "Special Waste Determinations, Criteria and Procedures." Ex. 7, Att. A. That policy requires applicants for declassifying special wastes to provide information on:

1. Aspects of the waste or waste stream;

2. Health and Environmental Aspects; and

3. Disposal Site Aspects.

Close examination reveals that several of the subcategories of major divisions of this policy document 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 of the waste," appears to replicate item B.1.c., which requires a "physical description and components of the waste"). For these reasons, the Board attempted to more clearly "sort out" the concerns addressed by the Agency's policy. Procedural matters aside, the Board perceived the Agency's concerns and addressed these concerns as follows:

1. Wastes whose physical form renders them 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. appeared at least partly directed to this concern.) The Board's proposal embodies this concern in Section 808.245(C)(1).

2. 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 at least partly directed to this concern.) The Board's proposal embodies this concern in Section 808.245(c)(2).

3. 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 at least partly directed to this concern.) The Board's proposal embodies this concern in Section 808.245(c)(3).

All three areas of concern are somewhat interrelated, particularly areas 2 and 3. For the purposes of the Interim Request proposal, the chemical properties of concern in item 2 were 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 2 are those properties that 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 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 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 qualify for a reduced classification or for declassification based on the requirement that the generator deliver them for transport or disposal in bags, barrels or other containment that precludes air dispersal.

One would normally expect declassification of wastes whose "toxic score" is zero. However, the Board 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 talcum powder and similar types of non-toxic "fines," which can, nevertheless, present a potent threat to handlers if significantly inhaled, illustrated the need for this type of mechanism to allow the Agency to keep tabs on shipment and disposal of such wastes.

Finally, the rules as proposed in the Interim Request did not define the "dangerous characteristics" alluded to in Section 808.245(e), nor did they itemize which characteristics apply to "special handling wastes," as defined in Section 808.110 and used in Section 808.242. One may assume that characteristics in the nature of those listed under 808.245(c)(1), (c)(2), and (c)(3) would tend to constitute "dangerous characteristics" which could render an otherwise declassifiable waste a "special handling waste." However, the Board refrained from explicitly limiting the Agency's discretion in this regard. This was to allow the Agency to consider other types of "dangerous properties" or other types of circumstances that could warrant labelling a waste as a "special handling waste."

PROPOSED SECOND NOTICE

The Second Notice Opinion and Order of November 15, 1989 contained further clarification and changes, primarily in response to comments received after the October 18 Interim Request (P.C. #14-21). This included the preliminary review

questions submitted by the Joint Committee on Administrative Rules (JCAR).

The Board accepted all comments submitted, including those filed late; the Interim Request comment period was short, and certain commenters stated that they received that document late. The Board received comments from the Department of Energy and Natural Resources and its Hazardous Waste Research and Information Center (DENR/HWRIC) (P.C. #19 and 21), the Illinois Environmental Protection Agency (Agency) (P.C. #20), and the Illinois Environmental Regulatory Group (IERG) (P.C. #17). Also, the Joint Committee on Administrative Rules filed preliminary review questions at the Board's request, and the Illinois Department of Commerce and Community Affairs, Small Business Assistance Bureau filed its review (P.C. #18). The Board also accepted the motion to substitute comments from the Illinois Steel Group (P.C. #22, substituted for P.C. #10 and 14) by its Order of November 2, 1989.

In certain respects, the comments received in response to the Interim Request contain information or arguments already considered by the Board and addressed in the October 18, 1989 Interim Request order (recounted in the above discussion). The November 15, 1989 Second Notice opinion (recounted below) concentrated on the Board's responses to those portions of the comments not previously addressed. The Board further revised the proposed rule in its Second Notice order in response to the comments received and the JCAR questions submitted prior to Second Notice. The Second Notice opinion explained the basis for the changes made to the Interim Request order text of the proposed rules.

Responses to the Interim Request

DENR/HWRIC supported the Interim Request proposal, but expressed concern in certain areas. DENR/HWRIC believed that the pH and flashpoint criteria should be used in evaluating waste hazard. The Board believed that the Agency would evaluate these criteria pursuant to Section 808.410, Physical and Chemical Analysis, as well as Section 808.245, Classification of Wastes. In essence, the Board intended that the Agency evaluate such parameters in addition to DENR/HWRIC's toxicological hazard based system. DENR also believed that IERG's "absurd results" example, set forth in an earlier comment (P.C.#11), overlooked the definition of innocuous substances. DENR/HWRIC suggested that a reference to this definition be included in Appendix B for clarity. The Board included a paraphrase of DENR/HWRIC's recommended language. See Section 808.Appendix B(a)(6).

DENR/HWRIC then summarized the status of its degree of hazard analyses of wastes reviewed by the Agency under its interim guidance policies. Of the 14 wastestream records the

Agency sent to DENR/HWRIC as samples, DENR/HWRIC could make a degree of hazard determination on eight. DENR/HWRIC could not evaluate five wastestreams: one because the Agency deemed it was not a waste, one because the Agency deemed it was not a special waste, two (that the Agency did not declassify) because of insufficient information, and one (that the Agency did declassify) because the information the Agency provided to DENR/HWRIC did not identify the waste constituents. In the latter case, DENR/HWRIC noted:

> Essentially no data on the waste were provided in the letter of application for delisting to IEPA. Only a sample was provided. The Agency reviewed the special waste stream application in making its determination but without specific criteria or standards. If the Agency would have had the use of the degree of hazard system when (sic) then they could have had a scientifically defensible basis for making their determination.
>
> P.C. #21, p.2.

The waste at issue was thermosetting plastic.

In a supplemental filing (P.C. #19)[5], HWRIC performed preliminary degree of hazard evaluations based on the information available for two of the eight delisting applications noted in their earlier comments. The first evaluation, of a molding sand, supported the Agency's decision to declassify. The second evaluation, of one of 80 items listed (called "Resolve") also posed a negligible degree of hazard. The Agency had not made a final determination on the latter application.

IERG (P.C. #17) asked a series of questions aimed at showing that the regulations would place a greater burden on the generator than that the Agency presently requires. IERG asked if anyone had complained about the present system of using Agency guidelines. In response, the Board noted in its Second Notice opinion that a scientifically-based system for ranking the toxicology hazard component obviously places a greater burden on the generator wishing to obtain relief. However, the Board stated that the conclusion did not follow that this burden therefore lacked merit. While the Board was uncertain as to what "complaints" IERG might have referred to, the Board did note:

1. Based on the record, the Board had crafted regulatory language that meshes the Agency's guidelines and DENR/HWRIC's system; and

---

[5] The P.C. numbers are out of sequence because of inadvertent delay in giving a number to P.C. #21.

2. The Board had provided a considerably firmer footing for Board review of an Agency decision on appeal.

IERG also asserted its belief that, while recognizing that the system is voluntary, generators will seldom use the system because of the increased costs of the informational requirements under the new system as compared to that required by the Agency pursuant to its guidelines. As an example, IERG used scrap polystyrene plastic that the Agency "delisted" based on an application to "delist," a copy of the supplemental permit, and a sample of the special waste. The Board noted that this waste appeared the same as or similar to the thermosetting plastic wastestream that DENR/HWRIC complained of for having informational deficiencies. The Board believed that the record in this proceeding supported the need for a methodology, including the underlying information, to assess the potential degree of toxicological hazard, and that DENR/HWRIC had justified the use of its system.

In its comments, the Agency strongly opposed the transitional requirement that it re-review the wastestreams on which it has already acted. The Agency asserted that this would strain its resources and provide no environmental benefit. In the Second Notice opinion, the Board disagreed. It is hardly unreasonable to require compliance with a regulation requiring a systematized toxicological review. The Board noted that the manifesting relief provided in these regulations would free up considerable Agency resources. The Board also suggested that the Agency's stated intent of not utilizing its authority in the transitional rules to phase-in 58 applications (at the most) would seem to aggravate the strain on resources of which the Agency complains.

The Agency raised other issues in its comments. In the Second Notice opinion, the Board further questioned the basis for the Agency assertion that its decisions are appropriately based on the fact that "the material did not pose an environmental or public health threat greater than that proposed by normal municipal waste." P.C. #20, p. 2. The Agency also disagreed with use of dual special waste classes (Classes A and B), asserting that the quarterly versus annual reporting system for Class A and Class B wastes, respectively, would cause confusion among generators, haulers, and receiving facilities and confer little environmental benefit. The Board disagreed. The Board decided that the four part manifest should continue and found it difficult to believe that a generator of a Class B special waste would suffer confusion over only having to file an annual report.

The Agency next questioned the use of terms like negligible, low, or moderate degree of hazard in Section 808.240(a) and (b), which the Agency suggests implies that refuse or municipal waste

poses a negligible degree of hazard. The Board noted that these regulations relate to special waste and do not address the municipal waste issue. However, the Board simplified Section 808.240(a) to succinctly state that there are Class A and Class B special wastes and declassified wastes. The Board believed that the use of low or moderate degree of hazard in Section 808.240(b) is appropriate to the ranking system. The Board added Section 808.100(c) to clarify that declassified wastes remain subject to Board regulations governing non-special wastes.

The Board responded in the Second Notice discussion to Agency concerns over the public availability of submitted information. The Board did not see how Section 808.302(b)(5) orders the release of confidential or trade-secret material any more than is the case, for example, in a permit setting. The Board also clarified that it intended maintenance of a publicly available list of data sources, required in Section 808.302, to include sources of data and bioassay procedures previously utilized by the Agency, thus removing the implication that these are of a rulemaking nature.

The Board further addressed Agency concerns over required reports under the proposed rules. In response to the Agency's recommendation that the Board require generators to submit discrepancy reports on an annual basis and annual reports in all cases, the Board notes that shifting such a requirement would impose a new burden on the regulated community beyond what the manifest regulations presently require. This is therefore a subject more appropriate to another proceeding. The Board also noted that the quarterly reports would enable the Agency to more timely oversee compliance for potentially high hazard special wastes.

As to concerns over any perceived added burden imposed by the system, the Board did not believe that the Interim Request Opinion and Order was unclear about the fact that the Board intended the toxic score as the first declassification screen which the waste must pass through for ultimate declassification. The Board determined that DENR/HWRIC system potential is a component of first concern. Also, the DENR/HWRIC system did indeed anticipate the availability of more information than is available in wastestream requests, a point DENR/HWRIC made in its own comments.

The Agency also recommended definitions for "Carcinogen" and "Mutagen." The Board did not feel that this was necessary in this particular regulation, and noted that the Agency stated that there are many and various definitions for these terms. The Board also noted that if a definition is necessary, there is merit to using the same definition as is used by USEPA. However, in deference to the Agency's stated concern, the Board inserted the proffered definitions in Section 808.110. The Board also

included the Agency's recommended definitions for pH and flashpoint in Section 808.410(b)(2) and (b)(3), for consistency with the clarification in the Board's October 18, 1989 Interim Request.

In response to the Agency's proposed changes regarding the oral versus inhalation rat issue, the Board declined to make the changes for reasons expressed by DENR/HWRIC and noted earlier in this Opinion. Also, while there was dispute over which test methodology should take precedence, the rules provide for flexibility. Paragraph (i) of Appendix B provides conversion factors for moving to an equivalent oral toxicity from other measures of toxicity based on exposure route, including inhalation and dermal routes.

Finally, the Agency expressed strong support for the Board's proposal to shift from the six part to a four part manifest and affirmed that the Board's regulatory format accurately reflected the Agency policy paper.

The Board also made other Agency-recommended changes when adopting the Second Notice version of the proposed rules:

1. The Board changed Section 808.402, so that it would require the generator to describe the current disposal processes applicable to the wastestream.

2. The Board changed Section 808.520, to delete the unnecessary 30 day "more information" limit.

3. The Board added "if any" after the words "expiration date" in Section 808.521(f).

4. The Board changed the annual Class B reporting date in Subsection 809.501(g) to October 1st rather than March 1st, as requested by the Agency.

5. As to Section 808.541, the Agency was correct that the Board had earlier acknowledged that the rules should not contain any language referring to motions for reconsideration before the Agency; the failure to earlier correct this section was inadvertent.

6. Regarding Agency-recommended changes to Section 808.430, the Board made the clarification in Section 808.402.

7. The Board added language to Subsection 808.430(a) to clarify that the applicant is to submit the underlying information or data used in the degree of hazard calculation.

8. The Board corrected a typographical error, "190 days," to "180 days" in Section 808.123.

The Board also made a number of changes to the proposal in the Second Notice order on its own initiative. Most of these were in the nature of corrections of typographical errors. The Board made some changes to promote internal parallelism in sentence structure or to eliminate redundancies (e.g., deletion of Sections 808.246 and 808.503). One change was to delete a reference to non-existent Part 810 (i.e., the former definition of "waste" in Section 808.110), consistent with the Board's First Notice Opinion, page 7. Changes of note include the following:

1. addition of subsection 808.240(e), to include a specific reference to Subpart H;

2. amendment of the definition of "special handling waste" in Section 808.110 and the provisions of Section 808.242, to make clear that the Agency can impose conditions on wastes in storage as well as in transport;

3. amendment of the title and text of Sections 808.243 and 808.244, for clarity;

4. amendment of Section 808.245(a), to clarify the standards for determining whether a test methodology is "equivalent or comparable" (and eliminating the use of these terms upon which the Agency and IERG negatively commented) and to provide for a binary alternative means of showing entitlement to a toxic score of 0 (zero) where Appendix B or its equivalent under 808.431 is inapplicable or unavailable (e.g., waste for which there is no toxicological data or testing protocol);

5. expansion of the "reasonably reliable" factors set forth in Section 808.302, to include bioassay procedures (necessitated by the previously-described amendments to Section 808.245);

6. restoration of Subsection (b) of Appendix B to its correct text as set forth in the Board's First Notice proposal; (The text of the Board's order of October 18, 1989, erroneously omitted the introductory portion of this subsection, rendering it meaningless, and further erroneously included text as a subparagraph (b)(1) that related to off-specification, surplus, or spoiled food products. This text was among several alternatives considered and rejected by the Board as overly broad and was never intended to be inserted in the proposal. Since no commentor made note either of this subsection's garbled text or its incongruous reference to food products, the Board assumes that no harm or prejudice occurred as a result of this error.)

and

7. changing of the reporting deadlines in Subsections 809.501(f) and (g) to "as mailed" rather than "as received," because of the relatively short time frame particularly for the quarterly reports.

The Board also made certain changes in response to JCAR's preliminary questions filed October 3, 1989.

1. In Section 808.123, the Board added a sentence to articulate that small quantity generators can record and maintain quantities and rates of waste generated and accumulated to establish compliance with the time limit on accumulation.

2. In Section 808.402(b), the Board deleted the second sentence. Appendix B is always used if a toxic score is to be calculated. Section 808.245(a) is the controlling language for alternative toxicity test methods. See JCAR question 10.

3. In Subpart H, the Board primarily created Section 808.600 to mesh the Board's Hazardous (infectious) Hospital Waste regulations from Part 809 into Part 808. The Board believes that it should preserve this Subpart. However, the Board modified the language of subsections 808.600(a) and (b) for greater clarity. See JCAR question 22.

4. In Section 808.110, the definition of "special waste" makes clear that the definition derives from the Act. See JCAR question 4.

5. In Section 808.412, the Board added a phrase from the Board Note to clarify when common names are to be used. See JCAR question 16.

6. In Section 808.520, the Board inadvertently omitted the statutory phrase in 22.9(e) regarding Agency denial of a request. See JCAR question 19.

7. In Section 808.545, the Board did not intend the requirement as a Board Note and has corrected this.

Other JCAR questions required only non-substantive edits. The Board made these without elaboration. The Board directly responded to JCAR during the Second Notice period on the rest of its questions.

The Board also noted in its Second Notice Opinion that DCCA deferred to the "Illinois Environmental Group" for its comments.

As a final observation in its Second Notice opinion, the Board noted that some of the concerns relating to potential problems with using the degree of hazard system were by and large speculative in nature. The Board also noted that, at hearing, DENR/HWRIC offered to supply diskettes for testing the system or for other purposes to anyone who requested them. However, the record since that time contains no challenges to the system. In any event, the Board was persuaded that further problems, if any, will not be identified until the regulations are effective and generators have submitted some of the data on which the system depends. If difficulties arise, the Board can later address them as demonstrated in another proceeding.

FINAL ADOPTION

The Board adopts the November 15, 1989 Second Notice text, and the enunciated rationale underlying that text, with no substantive revisions. However, the Board has effected a number of non-substantive changes to that text. These are limited to corrections to citation format, clarifying changes, grammatical corrections, etc. The Board effected these changes in two stages: prior to submission of the package to JCAR for review (on June 1, 1990) and during the course of dialogue with JCAR staff (up to July 9, 1990). The Board outlines those revisions in the following discussions.

Citation Format

The Board has revised the format of all citations to federal and state statutes, to the Administrative Code, and to other documents and corrected codification format where necessary to comport with current Administrative Code Unit requirements and present Board usage:

1. The simple reformatted citations are located at Sections 808.100(c), 808.101, 808.110 (definition of "Act"), 808.302(a), 808.431(a), 808.542(a), 808.542(b)(2), 808.545(b), 808.App. B(a)(3), 808.App. B(a)(5), 808.App. B(b)(2), 808.App. B(d)(2), 808.App. B(e)(3), 808.App. B(h)(3)(A), 808.App. B(j)(3), 809.103 (definitions of "Act," "Hazardous waste," "Manifest," "Refuse, and "Waste"), 809.211(a), 809.211(b), 809.211(c), 809.211(d), 809.211(e), and 809.211(f);

2. The corrected citations to the wrong Section are located at Section 808.110 (definitions of "Degree of hazard" and "Special handling waste" Board Note);

3. The previously-absent, newly-added name and citation to the relevant statutes are located at Sections 808.100(a) and 809.103 (definitions of "Refuse" and "Waste");

4. The previously-absent, newly-added statutory citations and proper format to the rule provisions that are merely quotations from the Illinois Revised Statutes are located at Section 808.110 (definition of "Special waste"), 808.121(c), and Section 809.103 (definitions of "Disposal," Garbage," "Hazardous waste," "Industrial process waste," "Person," "Pollution control waste," "Site," "Treatment," and "Waste");

5. The incorporations by reference, formerly at Sections 808.110 (definitions of "Carcinogen" and "Mutagen") and 808.410(b)(3) are now centrally located at Section 808.111, in the single format that the Board has begun to use for all incorporations by reference in Board rules (e.g., at Section 720.111 of the Board's RCRA rules); and

7. The Code-reformatted text appears at Section 809.501(j).

Grammatical, Punctuation, Clarifying, Etc. Revisions

The Board also revised the text of several sections to correct typographic, punctuation, and grammatical errors; to restore misplaced text; and to enhance clarity. The Board will not specify very minor typographic, punctuation, and grammatical corrections in this Opinion, but the other corrections of these types are as follows:

1. The restored text appears at Sections 808.110 (definition of "Hazardous waste"), 808.111 (ASTM Standard D-93-79 or D-93-80), 808.245(e), 808.App. B(a), 808.App. B(b), 808.App. B(c) (Board Note) (from 808.App. B(a)(4)), 808.App. B(e), 808.App. B(i), and 808.App. B(k)(2); and

2. The rewording for enhanced clarity appears at Sections 808.101, 808.110 (definitions of "Degree of hazard," "Hazardous waste," and "Special (non-RCRA) waste"), 808.122, 808.123, 808.240(b), 808.241, 808.243(b), 808.244(a), 808.244(b), 808.245 (all subsections except (b)), 808.300, 808.301(b), 808.302(b), 808.302(c), 808.400(a), 808.402(a)(4), 808.402(a)(6), 808.410, 808.410(c)(3), 808.410(c)(4), 808.410(d), 808.411 (both subsections), 808.412 (Board Note), 808.413 (all subsections except (a)(3), 808.420, (all, including second Board Note, except subsection (a)), 808.430 (all subsections, including second Board Note), 808.431 (both subsections), 808.501(a), 808.502 (both subsections), 808.521(e), 808.521(f), 808.541, 808.542(a), 808.542 (b)(1) (including Board Note), 808.543, 808.544, 808.545 (both subsections), 808.600 (both subsections), 808.App. A (reformatted), 808.App. B (preamble added), 808.App. B(a)(4) (Board Note), 808.App. B(b)(5), 808.App. B(d)(1), 808.App. B(g), 808.App. B(h)(2), 808.App.

B(h)(3) (all subsections except (A)), 808.App. B(j) (all subsections), and 808.App. B(k) (both subsections).

Other Revisions

Finally, the Board made a few corrections in consultation with JCAR staff that are worthy of individual note and discussion. These revisions are as follows:

1. New definitions of terms, "LC_{50}," "LD_{50}," and "TC_{50}" appear at Section 808.110. These terms are used at Sections 808.431(c), 808.App. B(h), and 808.App. B(i). The Board felt that adding the definitions would add clarity to the rules. Further, the Board changed the format of these terms to use the subscript, as is commonly used by toxicologists, rather than the prior format (e.g. LC50 now appears as LC_{50}). The Board believes that this will help avoid possible confusion as to the meaning of the terms.

2. A new Board note appears at Section 808.110 (definition of "Special waste") to highlight the fact that two definitions of "hazardous waste appear in the Solid Waste rules and the Act. The Board Note highlights that the definition of Section 3.15 of the Act applies to his definition, whereas the operative definition of "Hazardous waste" that appears at Section 808.110 applies throughout the rest of this Part.

3. New language at Section 808.240(c) clarifies the use of the Section 808.App. A flow chart for ascertaining waste categories. This language also makes clear that it is the order of appearance of the Part 808 queries on that chart, and not the order of appearance of the various sections in the main body of Part 808, which ultimately dictates the waste category.

4. Section 808.301(e) is now clear that the output of a computer-generated degree of hazard determination must display the data and data sources used.

5. Added language at Section 808.302(c) clarifies that only information protected under Sections 7 or 7.1 of the Act or Parts 101 or 120 of the Board's rules are exempt from Agency disclosure.

6. Language formerly at Section 808.502(b) relating to waivers of Agency decision deadlines no longer appears in the rules. The Board removed that "however" clause in response to a JCAR request that the Board include additional language specifically outlining the criteria whereby the Agency could hold an application. It is sufficient that members of the regulated community can deal directly with the Agency on

these waivers. The Board does not need to include language that explicitly outlines this inherent right.

7. The Board reformatted the flow chart of Section 808.App. A. This new format does not affect the decision branching of the chart in any way.

8. The effective date of the quarterly and annual report requirements, at Section 808.501(f) and (g), erroneously appeared as "January 1, 1990" in the Second Notice order. That date is past due. The Board revised those subsections to reflect the correct date of January 1, 1991.

CLARIFICATION

The Board has become aware that clarification of the applicability of this proceeding on the oil and gas exploration industry is necessary. The issue relates to the interpretation of the Section 809.211(e) exception for haulers of oil and gas extraction wastes.

Section 809.211 lists a number of exclusions from the special waste hauling and manifest requirements for persons engaged in specified activities. Subsection (e) excepts those described as follows:

> 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. 1989, ch. 96½, par. 5401 et seq.) and who hauls only oil and gas extraction wastes as defined in that Act.

Section 1 of the Oil and Gas Act, Ill. Rev. Stat. 1989, ch 111½, par. 5401, defines "person," "oil," "gas," and "waste." The Board intends that the Section 809.211(e) phrase "as defined in that Act" apply only to that statute's definitions of "oil" and "gas." Part 809 already includes the operative Environmental Protection Act definitions of "person" and "waste." See Section 809.103; see also Ill. Rev. Stat. 1989, ch. 111½, par. 3.26 & 3.53. Since the definitions of the Oil and Gas Act are not identical to those of the Environmental Protection Act, use of those terms "as defined in that Act" could lead to anomalous results. For example, the Oil and Gas Act definition of "waste" outlines a concept akin to a doctrine of equity in which "waste" is an activity rather than a thing. Therefore, the Board intends use of only "oil" and "gas" as defined in the Oil and Gas Act.

CONCLUSION

The Board has discussed the rationale for each revision made to the evolving text of the proposed rules at each stage of this

proceeding. To the extent the Board has, in this Opinion, reiterated the discussions from earlier opinions without a shift in position, the Board hereby adopts that matter as the present rationale for the adopted rule.

For the foregoing reasons the Board proceeds to adopt the special waste categorization rules as embodied in the separate Order of this same date. The Board will immediately file these rules with the Secretary of State and submit the Notice of Adopted Amendments for Part 809 and the Notice of Adopted Rules for Part 808 for publication in the Illinois Register.

IT IS SO ORDERED.

J. Dumelle and M. Nardulli dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above Opinion of the Board was adopted on the 9th day of August, 1990, by a vote of 4-2.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board