# ILLINOIS POLLUTION CONTROL BOARD May 25, 1989

A.R.E	F. LANDFILL CORPORATION,	)	
		)	
	Petitioner,	)	
	V.	)	PCB 89-15
		)	
LAKE	COUNTY BOARD,	)	
		)	
	Respondent.	)	

MESSRS. RICHARD J. KISSEL, BRADLEY R. O'BRIEN; GARDNER, CARTON & DOUGLAS APPEARED ON BEHALF OF PETITIONER;

MESSRS. FRED L. FOREMAN, MITCHELL L. HOFFMAN, AND LARRY M. CLARK; LAKE COUNTY STATE'S ATTORNEYS OFFICE, APPEARED ON BEHALF OF RESPONDENT;

MESSRS. MICHAEL SCHNEIDERMAN, CHRISTOPHER W. ZIBART, TODD R. WIENER; HOPKINS & SUTTER, APPEARED ON BEHALF OF AMICUS CURIAE PRAIRIE HOLDINGS CORPORATION AND LOCAL LANDOWNERS.

OPINION OF THE BOARD (by J.D. Dumelle):

This matter comes before the Board on the January 26, 1989 petition for appeal filed by A.R.F. Landfill Inc. ("A.R.F.") pursuant to Section 40.1 of the Environmental Protection Act (Ill. Rev. Stat. ch. 111 1/2, par. 1040.1 (1987)) ("Act"). A.R.F. appeals the November 1, 1988, decision of the Lake County Board ("LCB") denying local siting approval to A.R.F. proposed vertical expansion in Lake County, Illinois.

In its appeal, A.R.F. contends that a "biased and prejudiced" LCB rendered a decision denying A.R.F.'s application for vertical expansion. A.R.F. argues that the LCB's decision is against the manifest weight of the evidence.

Based on the record before it, the Illinois Pollution Control Board ("Board") finds that the hearing below was conducted in a fundamentally fair manner. The Board also finds that the decision of the LCB to deny A.R.F.'s application based on failure of A.R.F. to meet its burden of proof on the statutorily-defined criteria is not against the manifest weight of the evidence, except for the LCB's decision on Criterion No. 6.

## History

On June 30, 1988, A.R.F. submitted its application to the LCB for approval pursuant to Section 39.2 of the Act. In its

application A.R.F. proposed to design, construct, and operate a vertical expansion of its present Lake County facility. A.R.F. presently operates an 80 acre non-hazardous, primarily municipal waste landfill located on the east side of Route 83, approximately one-half mile south of Route 137. A.R.F.'s facility serves all but the northern portion of Lake County and a small portion of Northern Cook County.

The Chairman of the LCB appointed a special hearing panel, the Regional Pollution Control Hearing Committee of the Lake County Board ("Committee"), consisting of six County Board Members. Between October 17, 1988 and November 2, 1988, several public hearings were held with the Committee receiving testimony and evidence as well as oral and written public comment.

Prior to the commencement of hearing, Mr. William Alter filed an appearance in opposition to a grant of the application. Also prior to hearing, A.R.F. filed a motion to disqualify County Board Members F.T. "Mike" Graham, Bruce Hansen, and James Bolen on the grounds that they were biased and prejudiced against A.R.F. The motion was argued on the first day of hearing and the three Board Members were questioned during the first and second days of hearing. The LCB subsequently considered and denied A.R.F.'s motion.

On December 12, 1988, after the hearings and post-hearing comment period was complete, the Committee issued its findings and recommendations to the full LCB. The Committee found that A.R.F. had failed to satisfy each of the six criteria set forth in Section 39.2 of the Act. On December 28, 1988, the full LCB, by a vote of 19-1, adopted a Resolution denying the request of A.R.F. for vertical expansion.

## Regulatory Framework

Requirements for the siting of new regional pollution control facilities are specified in the Act. Section 39(c) of the Act provides that "no permit for the development or construction of a new regional pollution control facility may be granted by the (Environmental Protection) Agency unless the applicant submits proof to the Agency that the location of said facility has been approved by the County Board of the county if in an unincorporated area \*\*\* in accordance with Section 39.2 of this Act". The six applicable criterial set forth in Section

At the time of the filing of the Application, Section 39.2(a) of the Act contained eight criteria. Since the proposal is for a non-hazardous waste facility, and criterion #7 covers hazardous waste facilities, that criterion is not applicable. Criterion #8 is inapplicable because it covers requirements regarding location within a regulated recharge area, for which, at the time of filing of the Application, no such requirements (continued)

## 39.2(a) are, in pertinent part:

- (a) The County Board \*\*\* shall approve the site location suitability for such new regional pollution control facility only in accordance with the following criteria:
  - 1. the facility is necessary to accommodate the waste needs of the area it is intended to serve;
  - 2. the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected;
  - 3. the facility is located so as to minimize incompatibility with the character of the surrounding area and minimize the effect on the value of the surrounding property;
  - 4. the facility is located outside the boundary of the 100 year flood plain, or the site is flood-proofed;
  - 5. the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills or other operational accidents; and
  - 6. the traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows.

Section 40.1 of the Act charges this Board with reviewing whether the LCB's decision was contrary to the manifest weight of the evidence. E&E Hauling, Inc. v. Illinois Pollution Control Board, 116 Ill. App.3d 586, 451 N.E.2d 555 (2nd Dist. 1983), aff'd in part 107 Ill.2d 33, 481 N.E.2d 664 (1985); City of Rockford v. IPCB, 125 Ill. App.3d 384, 386, 465 N.E.2d 996 (1984); Waste Management of Illinois, inc., v. IPCB, 122 Ill. App.3d 639, 461 N.E.2d 542 (1984). The standard of manifest weight of the evidence is:

A verdict is ... against the manifest weight of the evidence where it is palpably erroneous, wholly unwarranted, clearly the result of passion or prejudice, or appears to be arbitrary, unreasonable, and not based upon the evidence. A verdict cannot be set aside merely because the jury (County Board) could have drawn different inferences and conclusions from conflicting testimony or because a reviewing court (IPCB) would have reached a different conclusion ... when

were yet adopted.

considering whether a verdict was contrary to the manifest weight of the evidence, a reviewing court (IPCB) must view the evidence in the light most favorable to the appellee.

Steinberg v. Petra, 139 Ill.App. 3d 503, 508 (1986).

Consequently, if after reviewing the record, this Board finds that the LCB could have reasonably reached its conclusion, the LCB's decision must be affirmed. That a different conclusion might also be reasonable is insufficient; the opposite conclusion must be evident (see Willowbrook Motel v. IPCB, 135 Ill.App.3d 343, 481 N.E.2d 1032 (1985)).

Additionally, this Board must evaluate whether the LCB's procedures used in reaching its decision were fundamentally fair, pursuant to Section 40.1 of the Act (see <u>E&E Hauling</u>). Since the issue of fundamental fairness is a threshold matter, the Board will consider this matter first.

## Fundamental Fairness

Ill. Rev. Stat. 1987 ch. 111 1/2 par. 1040.1 requires that this Board review the proceedings before the LCB to assure fundamental fairness. In E&E Hauling, the first case construing Section 40.1, the Appellate Court for the Second District interpreted statutory "fundamental fairness" as requiring application of standards of adjudicative due process (116 Ill.App.3d 586). A decisionmaker may be disqualified for bias or prejudice if "a disinterested observer might conclude that he, or it, had in some measure adjudged the facts as well as the law of the case in advance of hearing it" (Id., 451 N.E.2d at 565). is also important to note that in an analysis of bias or prejudgment elected officials are presumed to be objective and to act without bias. The Illinois Appellate Court discussed this issue in Citizens for a Better Environment v. Illinois Pollution Control Board, 152 Ill.App.3d 105, 504 N.E.2d 166 (1st Dist. 1987:

In addressing this issue, we note that it is presumed that an administrative official is objective and "capable of judging a particular controversy fairly on the basis of its own circumstances." (United States v. Morgan (1941), 313 U.S. 409, 421, 85L. Ed. 1429, 1435, 61 S. Ct. 999, 1004). The mere fact that the official has taken a public position or expressed strong views on the issues involved does not serve to overcome that presumption. (Hortonville Joint School District No. 1 v. Hortonville Educational Association (1976), 426 U.S. 482, 49 L. Ed. 2d 1, 96 S. Ct. 2308). Nor is it sufficient to

show that the official's alleged predisposition resulted from his participation in earlier proceedings on the matter of dispute. (Federal Trade Commission v. Cement Institute (1948), 33 U.S. 683, 92 L. Ed. 1010, 793).

#### 504 N.E.2d at 171.

As the Board noted in Waste management v. Lake County, PCB 88-190, April 6, 1989, a decision must be reversed, or vacated and remanded, where "as a result of improper ex parte communications, the Agency's decisionmaking process was irrevocably tainted so as to make the ultimate judgment of the Agency unfair, either to an innocent party or to the public interest that the Agency was obliged to protect" (E&E Hauling, 451 N.E.2d at 571). Finally, adjudicatory due process requires that decisionmakers properly "hear" the case and that those who do not attend hearings in a given case base their determinations on the evidence contained in the transcribed record of such hearings (Id., 451 N.E.2d at 569). (Also see E&E Hauling.)

A.R.F. claims that the LCB decision should be reversed because it resulted from a biased and prejudiced County Board. However, A.R.F. does not offer support for this claim. Apparently, A.R.F.'s claim is based upon its motion to disqualify the three Members of the County Board filed October 13, 1988. During the LCB hearings, the three Board Members, Graham, Hansen, and Bolen, were examined at to their ability to vote objectively on A.R.F.'s application. On December 28, 1989, the LCB, in the Resolution adopted on that date, denied A.R.F.'s motion. On appeal to this Board, A.R.F. offers no argument in opposition to the LCB denial of the motion to disqualify. In fact, the only argument A.R.F. offers in relation to the fundamental fairness issue apparently is to suggest that the LCB presents a "moving target". A.R.F. Brief at 1. A.R.F. states:

No matter what has been offered or performed by the applicant, Lake County has required more. If the applicant satisfied Lake County's initial "standards" in a subsequent local siting request, Lake County demands yet If a third request was filed which met the former demands, Lake County would demand yet more. It is a never ending cycle of increased demands that cannot be met at the local level. This is yet another example of the Not In My Back Yard or NIMBY syndrome that Lake County has exhibited so many times in the past. (Citations omitted). This never ending cycle is fed by the unfounded statements of Lake County's witnesses that are not based upon any recognized standards. Throughout the hearings, counsel for A.R.F. asked Lake County's hired witnesses what standards they were relying upon in reaching their "conclusions." None of Lake County's witnesses could definitely point to any regulations such as the Pollution Control Board's ("Board") regulations as guiding their "conclusions" regarding A.R.F.'s landfill design and operation. The Board cannot let Lake County's decision stand where the shaky foundation of its decision is based upon nothing but illusory standards and imagination.

A.R.F. Brief, pp. 1-2.

The Board is not persuaded. A.R.F. has offered no objective evidence to this Board to demonstrate that the LCB decision was the result of a fundamentally unfair process. Thus, the Board finds that the proceedings before the LCB were conducted in a fundamentally fair manner and will proceed to the merits of the Application.

## Statutory Criteria

A.R.F. claims that the LCB's conclusions as to each of the criteria are against the manifest weight of the evidence, and that the LCB's decision should be reversed and site location approved. We will review each of these criteria in turn.

## Criterion No.1

Section 39.2(a)(1) of the Act requires that the applicant establish that "the facility is necessary to accommodate the waste needs of the area it is intended to serve". Relevant case law from the Second District Appellate Court provides guidance on the applicable analysis of this criterion:

Although a petitioner need not show absolute necessity, it must demonstrate an urgent need for the new facility as well as the reasonable convenience of establishing a new or expanding an existing landfill. ... The petition must show that the landfill is reasonably required by the waste needs of the area, including consideration of its waste production and disposal capabilities.

Waste Management of Illinois, Inc. v.

PCB, 175 Ill. App.3d 1023, 530 N.E.2d 682

(2nd Dist. 1988); citing Waste Management of Illinois, Inc. v. Pollution Control

Board, 123 Ill. App.3d 1075, 463 N.E.2d

969 (1984).

The LCB found that A.R.F. failed to establish that its proposed facility is necessary to accommodate the waste needs of the area it is intended to serve with any credible evidence, stating that the analysis of Mr. Andrews, A.R.F.'s expert witness on the criterion, was not credible for the following reasons:

- A) He failed to do a complete analysis of the remaining capacity of the landfills in and around the Lake County area. Specifically, Mr. Andrews failed to include several active landfills to wit; active landfills being used by Lake County. He did not consider the expansion of the Techny landfill near Northfield, the East Troy landfill in nearby Wisconsin, the Zion, Lake Bluff, Land of Lakes, or the Lake County Grading landfills, all which accept waste from the A.R.F.'s service area.
- B) He failed to take into consideration the Lake County Joint Action Solid Waste Planning Agency plan for recycling, composting and other technologies designed to minimize the need for landfill capacity.
- C) He failed to consider proposed facilities, whether in or out of the County, if such facilities would be capable of handling a portion of the waste disposal needs of the County and will be capable of doing so prior to the projected expiration of the current disposal capabilities within the County, such that the needs of the County will continue to be served. Specifically, Mr. Andrews failed to take into consideration the Bartlett Balefill and, further, failed to adequately determine the Pheasant Run landfill and the Mallard Lake landfills in DuPage County, Illinois.
- D) Independent reports included in the A.R.F. application do not support the need for a new disposal site. The records provided indicate that from the SWPA and the IEPA that there is adequate existing landfill capacity until between 1994 and 1997.

#### (Res. at 3.)

It is well established that the burden is upon A.R.F. to demonstrate that the LCB's decision is contrary to the manifest weight of the evidence.

In support of its application, A.R.F. presented testimony at the LCB hearing of Mr. Douglas Andrews, a registered professional engineer. Mr. Andrews testified that he prepared a written report contained in the Application which addresses the issue of need. This report, which is contained in Volume II of the Application, at pages 529 to 556, identifies current waste disposal facilities serving the Lake County area and provides projections on future disposal capacities.

In his report, Mr. Andrews identified three municipal waste disposal facilities (Mallard Lake, BFI, and Pheasant Run) other than A.R.F.'s which may be available to accept municipal waste from Lake County. The Report indicates that if use of available capacity is projected from mid-1987 and a 5 percent annual increase is assumed, the entire present disposal capacity of the region would be exhausted by the end of 1993. The Report notes, however, that the Pheasant Run capacity cannot be relied upon with certainty because (1) it is located outside of the area which A.R.F.'s facility is intended to serve, and (2) the facility is beyond the jurisdiction and control of the State of (Appl. 540-541). Similarly the Report notes that the Illinois. Mallard Lake landfill capacity cannot be relied upon because it is located in DuPage County and the owners have in recent years attempted to limit the amount of out-of-county refuse accepted at the facility. (App. 541). The Report then offers a second evaluation which excludes the Pheasant Run and Mallard Lake landfills from the above projection and estimates capacity exhaustion in mid-1991. (App. 542).

Mr. Andrews testified that in mid-1987 there was approximately 55,600,000 cubic yards of capacity available and that the rate of use was on an annual basis approximately 7.5 million cubic yards. (R. 10/17 at 84). Mr. Andrews testified that he arrived at the 1993 exhaustion date by adding five percent to the rate of use and subtracting the number from the amount of available capacity until the available capacity was exhausted. (Id.). Mr. Andrews stated that he determined the available capacity by reference to a 1987 Illinois EPA publication entitled "Available Disposal Capacity For Solid Waste in Illinois", Attachment No. 1 to the Andrews' Report. Also attached to the Andrews' Report are the following: Attachment No. 3 - "Needs Assessment Under the Lake County Solid Waste Management Plan", dated February, 1988; Attachment No. 4 -"Regional Solid Waste Management Policy Plan for Northeastern Illinois" published by the Northeastern Illinois Planning Commission; and Attachment No. 5 - "Lake County Solid Waste Management Plan Feasibility Study". Mr. Andrews stated that he

relied, in part, upon these documents in the preparation of his report. (Id. at 79).

On cross-examination, Mr. Andrews testified that he decided to add a five percent increase in his analysis to waste received at the four facilities identified in the application because, in part, DuPage County is developing rapidly and apparently will be increasing its demand for landfill space. (Id. at 121). When questioned as to whether the increased demand would affect only the Mallard Lake landfill in DuPage County or would affect the Lake County landfills also, Mr. Andrews responded:

Well, there might be some increase also in Lake County. I simply said that I thought if you take DuPage County into account, you have to allow for some increase. Maybe five percent is not the right percent. Maybe it should be nigher than that. Maybe it should be a little lower than that but that's the number I used.

(Id. at 122).

In its brief on appeal, A.R.F. argues that the uncontroverted evidence shows an immediate need for A.R.F.'s vertical expansion. A.R.F. argues that Lake County's failure to offer "any evidence to rebut this inescapable conclusion is an admission that this need exists..." (A.R.F. Brief at 3-4). In response to the decision of the LCB, A.R.F. maintains that the Andrews Report incorporated each of the facilities enumerated in (A) above in its need analysis and determined that there is a need for A.R.F.'s facility. Further, A.R.F. argues that it considered the potential of alternatives to landfilling, such as recycling, and found that they would not reduce the need for A.R.F.'s expansion. Finally, A.R.F. argues that independent reports, such as the Lake County SWPA study and the IEPA study, support A.R.F.'s position that available capacity will be exhausted by mid-1993.

Lake County argues that A.R.F. failed to carry its burden of establishing need for its proposed expansion. In support of its position, Lake County states that Mr. Andrews did not consider the recent three year expansion of the Techny landfill in Northfield (R. 10/17 at 16). Nor did he consider the East Troy, Zion, Lake Bluff, Land of Lakes or Lake County Grading landfills (app. Ex. 7, p. 546), "all able to accept waste from within A.R.F.'s service area". (Lake County Brief at 5). Further, Lake County states that Mr. Andrews did not consider the potential effect that an intensive recycling and composting program would have on the rate of disposal and the amount of remaining capacity for landfills in and around the proposed A.R.F. service area. (Lake County Brief at 6.) Lake County also requests that the Board consider the October 1988 update of the IEPA Available

Disposal Capacity Report, which was not available at the hearings but was disseminated publicly thereafter and amends many figures in the earlier 1987 report relied upon by Mr. Andrews. Lake County argues that although the Hearing Officer denied its addmission into the record, the Board may take judicial notice of the contents of the report pursuant to 35 Ill. Adm. Code 103.206.

Amicus Curiae Prairie Holdings Corporation and local landowners ("Prairie Holdings" collectively) also argues that A.R.F. did not demonstrate that its proposed expansion is necessary to accommodate the waste needs of the area it is intended to serve. Basically, Prairie Holding's arguments paralleled those of Lake County, i.e., that Mr. Andrews (1) excluded date about available disposal capacity, (2) disregarded recycling and composting, and (3) relied on reports which refute his conclusions.

The Amicus, Prairie Holdings, argues that need in Lake County has not been demonstrated because less than half the waste disposed in lake County is generated within the County (Amicus Brief, p. 11). The Board does not today address whether such a consideration can be a viable part of a decision on the need criterion.

In its reply brief, A.R.F. responded to many of the statements made by Lake County and Prairie Holdings.

As a preliminary matter, the Board upholds the Hearing Officer's ruling on the admissability of the October 1988 IEPA report; it is not a part of the record on appeal. Section 40.1 of the Act clearly states that the hearing (before the Board) shall be based exclusively on the record before the county board. As this report was not before the Lake County board when it rendered its decision, it is properly not before this Board.

Also, the Board notes that on April 6, 1989, the Board rendered a decision upholding the LCB's denial of local siting approval to Waste Management of Illinois, Inc. Waste Management of Illinois, Inc. v. Lake county Board, PCB 88-190. The nature of this criterion is such that the analysis by the Lake County Board in this case is strikingly similar to that in Waste Management; much of the same information was relied upon, and similar reasons for denial of approval were given. The Board's findings on this criterion are consistent with the Board's decision in Waste Management.

The Board finds that its evaluation of the LCB's decision on Criterion No.1 is a difficult call, especially in light of the fact that there were no witnesses presented to rebut the testimony offered by A.R.F.. However, the Board also believes that it is necessary for its analysis in this instance to place the decision of the LCB in the context in which it was made. As this Board observes from its examination of the record in this

proceeding the issue of waste disposal programs and capacities in Lake County is hardly a matter of first impression of the LCB. The LCB has reviewed many applications for landfill siting within recent years. These prior reviews included extensive analyses of waste disposal capacity with substantial portions of the records directed to the issue of the need for a landfill. These prior reviews, in most cases, were further appealed to this Board and the Second District Appellate Court. Moreover, during the time that the LCB has handled these reviews there has been minimal change in the composition of the siting committees and the board itself.

Additionally, Lake County has itself been actively engaged in waste disposal planning through it agency, the Lake County Joint Action Solid Waste Planning Agency ("SWPA"). Although SWPA did not testify before the LCB in the instant record (as it had in prior LCB siting proceedings), it did submit a public comment fully reiterating its position, and concluding that the A.R.F. proposed landfill is not a necessary facility.

Taken together, these observations demonstrate that the LCB is a body well-versed on the issue of need for waste disposal capacity in Lake County. The LCB asked pointed questions, which indicated that the witness failed to consider matters among those noted in the LCB's conclusions. The LCB demonstrated acute knowledge of Criterion No.1 issues, and was clearly not satisfied with the answers received, specifically regarding the availability of disposal options at other facilities.

As noted above, the LCB found that A.R.F. failed to establish that the proposed facility is necessary to accommodate the waste needs of the area it is intended to serve, finding A.R.F.'s witness' testimony incredible. At first blush, the deficiencies noted by the LCB may seem less weighty than the evidence presented. It may even be said that upon review of the same evidence this Board or another reviewing court may have reached a different conclusion. However, under the manifest weight standard and given the understanding of Criterion No. 1 issues exhibited by the LCB as noted above, as well as the fact that the LCB was in the best position to judge the credibility of the evidence presented, the Board finds that the LCB's findings on Criterion No.1 are not contrary to the manifest weight of the evidence.

## Criterion No. 2

Section 39.2(a)(2) of the Act requires that the applicant establish that "the facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected."

Matters pertaining to Criterion No. 2 encompass approximately half of the Application, and a large amount of the

testimony presented at hearing. The principal A.R.F. witnesses addressing Criterion No. 2 were Dr. Rauf Piskin (R. 10/18 at 3 et seq.) and Mr. Michael D. Andrews (R. 10/19 at 87 et. seq.). County witnesses addressing this Criterion were Dr. Nolan Augherbaugh (R. 10/27 at 4 et. seq.) and Mr. George Noble (R. 10/31 at 4 et. seq.).

Criterion No. 2 encompasses, by its nature, a wide variety of location, design, and operational issues, of varying non-technical and technical nature. Locational issues include whether the landfill is proposed to be expanded at a physically suitable site, in consideration of at least local geology and hydrogeology. Design elements include the protective features of the landfill design, such as a landfill liner, leachate collection system, gas control system, groundwater monitoring system, and surface water control system. Also encompassed in Criterion No. 2 are a variety of proposed operational elements, including type and frequency of monitoring of air, land, and water, daily operational plans, and closure and post-closure maintenance.

Apparently not all of the many potential issues related to Criterion No. 2 were found by the LCB to enter into its decision. Rather, the LCB cites only a limited number of issues which it contends contributed to A.R.F.'s failure to carry its burden of proof with respect to Criterion No. 2.

After noting that A.R.F.'s proposal was to "place a synthetic membrane liner and a leachate collection system directly on top of an existing landfill and create a new landfill on top of the existing landfill" (County Res. at 4), the County found certain inadequacies in A.R.F.'s proposed design and Operation. A brief summary of the County's reasoning is as follows: Refuse deposited in a landfill decomposes at different rates. This is known as "differential settlement." Placing a new landfill with its attendant liner and leachate system, directly on top of the existing landfill could threaten the integrity of both the liner and the leachate system. The constant shifting of the surface beneath the new landfill would eventually cause the membrane liner to rupture and tear and cause the leachate collection pipes to become clogged and possibly break.

Also, the County found that the hydrogeology of the area was not examined thoroughly. The County heard testimony by Dr. Augherbaugh and by Dr. Piskin that there are sand lenses, which are pockets or columns of sand, which create rivers or streams to allow different liquids to escape. Although borings taken at the proposed site revealed mostly clay characteristics, sand seams were present running through the clay. A.R.F.'s witness testified that these sand lenses were discontinuous. Lake County's witness testified that there are two ways to prove that sand lenses are discontinuous; either complete excavation or a

prolonged permeability test. The County found that A.R.F. had done neither and, therefore, it could not be assumed that the seams were discontinuous. (County Res. at 5.) Further, the County found that several seams were not the only avenues by which the leachate could travel through the A.R.F. landfill. There had been 40 borings performed for A.R.F. which were back filled with auger spoils rather than being sealed with bentonite grout. The County stated that A.R.F. had experienced leachate leaks from the existing landfill which are indicative of a saturated condition. However, the County found A.R.F. failed to place any monitoring wells into the aquifer layer to determine whether the aquifer has been contaminated by leachate.

A.R.F. argues that the LCB's finding on differential settlement is wrong. A.R.F. maintains that it is operating its current landfill and has designed its vertical elevation "to either minimize differential settlement or take it into account." (A.R.F. Brief at 27.) A.R.F. states that differential settlement is not a concern because A.R.F. is proposing (1) a multiple liner system, (2) an 80 mil. geomembrane, (3) compaction, (4) a uniform surface on the existing landfill, and (5) a leachate collection system that includes two back-up systems. (Id.) A.R.F. also asks the Board to take into account the superior credentials of A.R.F.'s witnesses (Andrews and Piskin) versus the "unqualified Lake County's witnesses" (Noble and Aughenbaugh). (A.R.F. Brief at 16.)

Lake County argues that all of the witnesses agreed that differential settlement occurs commonly in landfills and can be Lake County states that its witness, Dr. Aughenbaugh, extensive. had several major criticisms of the structural soundness of A.R.F.'s proposed expansion. Dr. Aughenbaugh stated that A.R.F.'s plan to reduce differential settlement by running a compactor over the trash would be ineffective because once the compactor has been run over trash 8-10 times, no further compaction can be achieved. (R. 10/27 at 39-40.) Dr. Aughenbaugh also stated that it was unrealistic to put a leachate collection system and synthetic liner on top of an old landfill because, with the inevitability of differential settlement, the synthetic liner would eventually stretch and rip, causing the leachate collection pipes to settle, crack, break, and shear (Id. at 43.) Lake County also points to Dr. Andrew's statement that he knew of "no reliable way to predict the amount of differential settlement which would occur" (R. 10/19 at 108), to support the LCB's decision.

Amicus Prairie Holdings' arguments are similar to Lake County's. Prairie Holdings argues that the evidence shows that landfills can experience significant differential settlement. Prairie Holdings pointed to two studies discussed by Mr. Noble, one of a vertical expansion in Pontiac Michigan and the other of a landfill at Mission Canyon, Californía. (R. 10/31 at 28-29.) Prairie Holdings argued that A.R.F.'s proposed "densification"

process to minimize the effects of differential settlement is not supported by the Record.

A principal element in this Board's review of the LCB decision is whether, in light of the manifest weight of the evidence standard, the decision of the LCB was "palpably erroneous, wholly unwarranted, clearly the result of passion or prejudice, or appears to be arbitrary, unreasonable, and not based upon the evidence" (Steinberg v. Petra, supra) given the nature of the testimony.

Despite attempts to call into question the expertise of both Mr. Noble and Dr. Aughenbaugh, this Board in its own technical review of the materials presented in the record, cannot find fundamental fault with the pertinent conclusions drawn by these witnesses. Where conflicting testimony exists, it is in controlling part disagreement among apparently qualified and competent individuals. Moreover, given this conflicting testimony, it is not against the manifest weight of the evidence that a majority of the LCB found that A.R.F. had not carried its burden of proof with respect to geologic and hydrologic aspects of Criterion No. 2. Accordingly, this Board must affirm the LCB's decision on Criterion No. 2.

The analysis of the differential settlement aspect of Criterion No. 2 is dispositive of this matter. However, for the record, this Board notes that the LCB included additional factors in its decision on Criterion No. 2. These include considerations of leachate management hydrogeology, post-closure care, and litter control. (Resolution at 5-6.) This Board does not find that the LCB's decision on these additional factors, in their aggregate, is against the manifest weight of the evidence.

#### Criterion No. 3

Section 39.2(a)(3) of the Act requires that the applicant establish that the proposed facility is located so as to minimize incompatibility with the surrounding area and to minimize the effect on the value of the surrounding property.

On this issue, A.R.F. presented Jay M. Heap (R. 10/20 at 4 et. seq.). The County's witnesses included Herbert Harrison (R. 11/2 a.m. at 6 et. seq.) and Robert Mosteller (R. 10/31 p.m. 36 et. seq.). Prairie Holdings witnesses included Anthoney Tives (R. 10/27 a.m. at 5 et. seq.) and Lane Kendig (R. 10/27 a.m. at 24 et. seq.).

Jay Heap, a real estate appraiser, determined that A.R.P.'s proposed facility will minimize incompatibility with the character of the surrounding area and will minimize the effect on the value of surrounding property. Included within his analysis, Mr. Heap conducted a visual impact study using a helium filled, optic orange, 36 inch balloon. Mr. Heap placed the balloon

approximately where the highest point of the proposed site would reach and attempted to view the balloon from various positions in a one mile square area around the site. Mr. Heap testified that most of the areas where the landfill was visible were predominantly agricultural areas rather than residential areas. (R. 10/20 a.m. at 25.) Also included in Mr. Heap's analyses are (1) A.R.F.'s plans for construction and operation, (2) the zoning land usage and principal characteristics of the site, and (3) an analyses of the residential sales, vacant land sales, and building permit issuance.

Lake County's witness, Mr. Herbert Harrison, testified that, in his opinion, Mr. Heap's conclusion was not supported by the report. Harrison testified that Heap's analysis failed to include a "before and after" analysis by studying property values before and after the construction of the landfill and/or a comparative study of property values by studying properties remote from the site and then comparing them to closer properties. (R. 11/2 a.m. at 19-20, 29-30.) Harrison also testified that studies have shown a general tendency towards an increase in property values in areas surrounding landfills or gravel pits as the date of closure of the facility nears. Lake County argues that no such study was done by Mr. Heap in this case.

Prairie Holdings argues that the visible impact (balloon) study was inconclusive because, inter alia, it failed to take into account increased visibility during winter when the trees are bare (Amicus Brief at 28). Prairie Holdings also argues that proposed expansion does not minimize the incompatibility with nearby wetland resources, although the LCB did not rely on this in its denial on Criterion No. 3.

Criterion No. 3 calls for the facility to be located so as to "minimize" incompatibility -- but does not allow for rejection simply because there might be some reduction in value. A.R.F. Landfill, Inc. v. Lake County, PCB 87-51, Slip Op. 10/1/87 at 24; citing Watts Trucking Service, Inc., v. City of Rock Island (PCB 83-167). More is required of an applicant than a de minimus effort at minimizing the facility's impact. An applicant must demonstrate that it has done or will do what is reasonably feasible to minimize incompatibility. Waste Management of Illinois, Inc. v. IPCB, 123 Ill. App.3d 1075, 1090 (2nd Dist. 1984).

The Board finds that the LCB's findings on Criterion No. 3 are not against the manifest weight of the evidence. The Board cannot find fundamental fault with the conclusions drawn by the witnesses who testified on behalf of A.R.F. and the County. In the briefs, both the LCB and A.R.F. debate the propriety of examination of property values before and after the introduction of a landfill into the area. The Board finds that the witnesses held differing but viable views on this aspect, as is also

conflicting evidence on the issue of minimization of the impact upon the character of the surrounding area and whether the minimization efforts as proposed are sufficient. Because there is viable testimony on both sides of the Criterion No. 3 issue, the Board finds that determination of the LCB on Criterion No. 3 is not against the manifest weight of the evidence.

## Criterion No. 4

Section 39.2 (a)(4) of the Act requires that the applicant establish that "the facility is located outside the boundary of the 100 year flood plain or the site is flood-proofed". The LCB found that A.R.F. failed to meet its burden of proof on this criterion. The principal A.R.F. witness addressing this criterion was Mr. Michael D. Andrews, P.E.

A.R.F. argues that because it is proposing a vertical elevation of its current facility, the proposed facility will be well above the 100 year flood plain. (A.R.F. Brief at 42.) Further, notwithstanding that the proposed site is not in a flood plain, A.R.F. argues that it would provide flood protection for the landfill for a 25-year storm and the surrounding area for a 10-year storm. (Id. at 42.)

The LCB found that A.R.F. had failed "to present any evidence establishing either that the proposed expansion is totally outside of a flood plain or that the site is adequately flood-proofed. (Res. at 7.) Specifically, the LCB noted that A.R.F.'s expansion would include areas near the entrance gate and ticket house presently located at the facility. The LCB found no evidence to determine whether or not these areas are in a flood plain. Further, the LCB found that "the retention pond that is clearly in the flood plain was not built to accommodate a 25-year storm". (Res. at 8.)

When asked whether there are any flood plains involved, Mr. Andrews, A.R.F.'s witness, testified that the elevation of water in the 100-year flood plain is approximately 799 feet. (R. 10/19a.m. at 133.) Mr. Andrews stated that the landfill office and shown as the equipment building on Applicant's Exhibit 21 page 138 ... are built at elevation 800 at floor level. So some of the area around these buildings is within the 100 year flood plain. (Id.) Also, Mr. Andrews stated that a "considerable amount of the area in the 28.6 acres north of the landfill is below the 800 foot elevation. The purpose of this 28.6 acres is to "create a place where detention of drainage and sedimentation can occur". (Id. at 127-128.) Thus, Mr. Andrews concluded "some of that area is flood plain or within the boundary of the hundred year flood elevation". (Id. at 133.) However, when Mr. Andrews was asked whether the site has been properly flood-proofed, he responded "[t]his site involves placement of waste only above the 840 elevation. So any waste placement ... [is] well above the hundred year flood plain" (Id. at 134).

Based on this Board's review of the record, and particularly that portion discussed above, this Board believes that the LCB's decision is not against the manifest weight of the evidence. A.R.F.'s own witness testified on direct examination that some of the area is within the boundary of the 100-year flood plain. Thus, this Board believes that the LCB could have reasonably found that A.R.F. failed to demonstrate that the facility is located outside of the 100-year flood plain. The Board notes, in passing, that the LCB's Resolution is somewhat inarticulate on The Resolution states "[t]here has been no evidence this point. as to whether or not A.R.F.'s area is located in a flood plain". (Res. at 8.) This Board believes that there is evidence on this issue; however, the evidence is contradictory and does not lend itself to clear interpretation. Nonetheless, the LCB's decision on this criterion is not against the manifest weight of the evidence.

## Criterion No. 5

Section 39.2(a)(5) requires the Applicant to demonstrate that "the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other occupational accidents." The LCB found that A.R.F. failed to make this demonstration. In support of its finding, the LCB stated in part:

"The applicant has truly not presented any contingency plan to deal with the leachate or hazardous gas condensate. There was no clear plan for dealing with spills of any hazardous materials which may occur ... the application contained no provision for checking the leachate control system before putting waste into the landfill.

(Res. at 8.)

A.R.F. argues that it has extensive safeguards in place to minimize the danger to the surrounding area from fire, spills and operational accidents. These safeguards are apparently embodied in written site safety policies as well as in the day-to-day operations of the facility. (See Appl. at 101-109.) In its Brief, A.R.F. argues that it has presented a comprehensive contingency plan for "hazardous" gas condensate. (A.R.F. Brief at 46.) A.R.F. also describes its "plan to deal with leachate" by reference to its operating plan in the Application (Appl. at 22-148).

In its Brief, Lake County argues, in part, as follows:

Leachate removal was also not adequately provided for. The application contained no provision for checking the leachate control

system before putting waste into the landfill (Transcript of 10-19-88 at page 176). There was no pre-set level to dictate removal of leachate from the manholes (Id. at page 180) and no five day storage capacity for leachate (Id. at 184).

Leachate would be pumped out of the manholes overland; in some cases up to 225 feet from the manholes into tanker trucks (Transcript of 10-20-88 at page 58). According to A.R.F.'s own estimates, they will require 444 semi trucks a year just to remove leachate from the new landfill (Id. at 48). This is approximately 2,000,000 gallons of leachate a year, which even Mr. Andrews admitted was a "significant" amount (Id. at 67).

## (Lake County Brief at 20.)

Based on its review of the record, this Board finds that the decision of the LCB is not against the manifest weight of the evidence. Although the Board stated in Waste Management of Illinois, Inc. v. Lake County, PCB 88-190 that "the Act only requires that the applicant propose a plan which is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents, the Board is precluded from reweighing the evidence anew. The LCB apparently determined that the above quoted deficiencies covered matters necessary to "minimize" the danger to the surrounding area; that is not unreasonable. A.R.F.'s witness, Mr. Andrews, admitted that those issues were not addressed in A.R.F.'s application (R. 10/19 at 176-184). Thus, the LCB's decision is not against the manifest weight of the evidence.

#### Criterion No. 6

Section 39.1(a)(6) requires the Applicant to demonstrate that "the traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows". The LCB found that A.R.F. failed to sustain its burden of proof on this criterion. Specifically, the LCB states, in part:

The traffic section of the application was prepared by Gerald Salzman who testified at the hearing as to the basis of his conclusions that the traffic design would minimize impact on traffic flows. Mr. Salzman did not take into account the proposed uses in the area for residential sites to the west and south of the site on his impact of traffic flow. He also did not take into account leachate collection trucks entering to and from the facility.

Further, his data was based on 1983 daily traffic reports from the Illinois Department of Transportation as his basis for analysis. Mr. Salzman further lacked information as to whether or not the local roads could safely accommodate the truck traffic from the vertical expansion since many of the roads in the area were minor roads and there were no assurances that trucks would be permitted to use those types of roads. Mr. Salzman's credibility was damaged in that he testified that the accident rate along Route 83 in front of the A.R.F. site was relatively low. However, Cliff Scherer of Illinois Department of Transportation testified to the contrary. According to Mr. Scherer, the IDOT records show that in 1986, the accident rate along Route 83 in front of the A.R.F. site was 4 times the statewide average for a similar type In 1987, it was 1.1 times the state of road. In 1988, the accident rate was 2.5 times the statewide average. Many of the residents further testified that there was mud and debris on the roadway and that upon rain it became slick and dangerous upon passing nearing the A.R.F. site.

(Res. at 9-10.)

A.R.F. argues that it was the only party that introduced an expert witness to discuss this criterion. A.R.F.'s witness, Mr. Gerald Salzman, testified that not only will A.R.F.'s facility minimize its impact upon surrounding traffic flow, but it will safely provide for an increase in surrounding traffic. (R. 10/24 p.m. at 15.) A.R.F. argues that its proposal minimizes impact on existing traffic flow in part because, A.R.F. will install rightand left-hand turn lanes at the site enterance. A.R.F. has received preliminary approval from the Illinois Department of Transporation for the proposed improvements. In addition, A.R.F. will increase the curb return radius to a minimum of 40 feet at the intersection of Routes 137 and 183 to provided a wider turning radius for trucks to travel through the intersection. These improvements will insure that there will be not adverse impact upon the surrounding roadways (R. 10/24 at 14-16) (App. 1000-1005).

As a preliminary matter, the Board believes that many of the reasons given by the LCB for denial on this criterion are not related to a consideration of whether the traffic patterns are designed so as to minimize the impact on existing traffic flows. For example, that Mr. Salzman did not consider proposed residential uses is not relevant to an evaluation of impact on existing uses. That is a future occurrence. Moreover, the LCB's

consideration of past accident rates also are not relevant to an evaluation on this criterion. The past accident rate may be used to describe existing traffic flows, but this Board does not see the relevance of the past accident rate, in and of itself, with respect to the impact of the proposed facility on existing traffic flows. Thus, the LCB's decision cannot be supported on these grounds.

The Board believes that the only relevant basis for the LCB's denial is that "Mr. Salzman did not take into account leachate trucks entering to and from the facility". (Res. at 9.) A.R.F. argues that Mr. Salzman did take the leachate trucks into consideration. A.R.F. points to Salzman's testimony that estimated one or two additional leachate trucks per day and that that was included in A.R.F.'s sensitivity analysis, which indicated that with improvements, the Route 83 intersection will be able to accommodate that 50 percent growth in traffic. (R. 10/24 p.m. at 31-32.) Lake county offers not argument in opposition.

The Board finds that the record reflects that Mr. Salzman did consider the impact of the leachate trucks entering and exiting the facility. Thus, the LCB's decision cannot stand on that basis. From further examination of the record, the Board finds that A.R.F. adequately addressed the matter which appear to be of concern to the LCB, but which were not specifically articulated in the Resolution. Because the Act only requires that the traffic patterns to and from the facility be so designed as to minimize the impact on existing traffic flows, and because the Board has determined that the LCB's decision is not supported by the relevant record, the Board finds that the decision of the LCB on Criterion No. 6 was against the manifest weight of the evidence.

Having found that the LCB's decision on Criteria Numbers 1 through 5 are not against the manifest weight of the evidence, the Board affirms the LCB's decision to deny A.R.F.'s application.

The Board notes that ARF filed, on May 5, 1989, a Motion For Admission of Lake County's Study. ARF advanced several arguments in support of its motion and also waived the decision deadline to June 23, 1989. As the Board upheld the Hearing Officer's ruling on the admission of the October 1988 IEPA Report, the Board similarly denies the admission of the Lake County Study from the record in this case. Section 40.1 of the Act clearly states that the hearing shall be based exclusively on the record before the county board. As this report was not before the Lake County Board in the record on A.R.F.'s Application, it is not before this Board on review.

This Opinion constitutes the Board's findings of fact and conclusions of law.

IT IS SO ORDERED.

Board Members J. Anderson, J. Marlin & J. Theodore Meyer concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion was adopted on the 25% day of 3% , 1989 by a vote of 7-o.

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board