BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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| CITY OF KANKAKEE,<br>Petitioner,<br>vs.<br>COUNTY OF KANKAKEE,<br>COUNTY BOARD OF KANKAKEE,<br>and WASTE MANAGEMENT OF<br>ILLINOIS, INC.<br>Respondents. | ) | PCB 03-125<br>(Third-Party Pollution Control Facility Siting Appeal) |
| MERLIN KARLOCK,<br>Petitioner,<br>vs.<br>COUNTY OF KANKAKEE, COUNTY<br>BOARD OF KANKAKEE, and WASTE<br>MANAGEMENT OF ILLINOIS, INC.<br>Respondents. | ) | PCB 03-133<br>(Third-Party Pollution Control Facility Siting Appeal) |
| MICHAEL WATSON,<br>Petitioner,<br>vs.<br>COUNTY OF KANKAKEE, COUNTY<br>BOARD OF KANKAKEE, and WASTE<br>MANAGEMENT OF ILLINOIS, INC.<br>Respondents. | ) | PCB 03-134<br>(Third-Party Pollution Control Facility Siting Appeal) |
| KEITH RUNYON,<br>Petitioner,<br>vs.<br>COUNTY OF KANKAKEE, COUNTY<br>BOARD OF KANKAKEE, and WASTE<br>MANAGEMENT OF ILLINOIS, INC.<br>Respondents. | ) | PCB 03-135<br>(Third-Party Pollution Control Facility Siting Appeal) |

**NOTICE OF FILING**

**TO: See Attached Service List**

**PLEASE TAKE NOTICE** that on June 2, 2003 there has caused to be filed with the Clerk of the Illinois Pollution Control Board located at the James R. Thompson Center, Suite 11-500, 100 W. Randolph St., Chicago, Illinois, via hand-delivery an original and 9 copies of the following documents, a copy of which is attached hereto:

**Brief And Argument Of Petitioner, Merlin Karlock**

GEORGE MUELLER, Attorney at Law

## PROOF OF SERVICE

I, Pat Wheeler, a non-attorney, on oath state that I served a copy of the above listed documents by sending the same to each of the parties listed on the attached Service List via U.S. Mail from Ottawa, Illinois, at 5:00 P.M. on June 2, 2003, with proper postage pre-paid.

Pat Wheeler

Pat Wheeler

**SUBSCRIBED AND SWORN TO** before me this 2nd day of June, 2003.

"OFFICIAL SEAL"
GEORGE MUELLER
NOTARY PUBLIC, STATE OF ILLINOIS
My Commission Expires 08-06-05

NOTARY PUBLIC

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**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

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| **CITY OF KANKAKEE, Petitioner, vs. COUNTY OF KANKAKEE, COUNTY BOARD OF KANKAKEE, and WASTE MANAGEMENT OF ILLINOIS, INC. Respondents.** | ) | **PCB 03-125 (Third-Party Pollution Control Facility Siting Appeal)** |
| **MERLIN KARLOCK, Petitioner, vs. COUNTY OF KANKAKEE, COUNTY BOARD OF KANKAKEE, and WASTE MANAGEMENT OF ILLINOIS, INC. Respondents.** | ) | **PCB 03-133 (Third-Party Pollution Control Facility Siting Appeal)** |
| **MICHAEL WATSON, Petitioner, vs. COUNTY OF KANKAKEE, COUNTY BOARD OF KANKAKEE, and WASTE MANAGEMENT OF ILLINOIS, INC. Respondents.** | ) | **PCB 03-134 (Third-Party Pollution Control Facility Siting Appeal)** |
| **KEITH RUNYON, Petitioner, vs. COUNTY OF KANKAKEE, COUNTY BOARD OF KANKAKEE, and WASTE MANAGEMENT OF ILLINOIS, INC. Respondents.** | ) | **PCB 03-135 (Third-Party Pollution Control Facility Siting Appeal)** |

# BRIEF AND ARGUMENT OF PETITIONER, MERLIN KARLOCK

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# BRIEF AND ARGUMENT OF PETITIONER, MERLIN KARLOCK

## I. Introduction

Before the year 2002, Waste Management of Illinois (hereinafter "WMI") owned and operated a 179-acre, pre-Subtitle D landfill in rural Kankakee County south of the corporate limits of the City of Kankakee. Portions of this facility did not, and still do not, have an engineered liner. Pursuant to the Kankakee County Solid Waste Management Plan requirements, the facility did not accept waste from outside Kankakee County. (Board Hearing, Watson Exhibit #7) [1]

On October 9, 2001, the Kankakee County Solid Waste Management Plan was amended to remove the preclusion on acceptance of out-of-county waste. (C-701, 702). On March 12, 2002, the Kankakee County Board once again amended it's Solid Waste Management Plan, this time incorporating some new technical and substantive requirements to be met in any application for local siting approval. (C-703-706). The following day, March 13, 2002, Town & County, Inc., and Kankakee Regional Landfill, L.L.C. filed an Application with the City of Kankakee for siting approval of a new regional pollution control facility (landfill) at the southern edge of the City and near the existing WMI facility. On March 29, 2002, WMI filed an Application with the County of Kankakee for siting approval of expansion of its existing facility into a 664-acre regional landfill. The City Council of the City of Kankakee, after a lengthy and contested hearing at which both the County of Kankakee and WMI participated as objectors, unanimously granted siting approval to Town & Country. That decision was appealed to this Board in cases:

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[1] References to the record will distinguish between references to the County Hearing conducted in November and December of 2002 and the Pollution Control Board Fundamental Fairness Hearing, referred to as BD. HRG., conducted on May 5th & 6th, 2003. The transcript of the multi-day County Hearing has numbered volumes and will be referred to as such.

PCB 03-31, 33, and 35, and this Board is asked to take judicial notice of the arguments and record in those cases, particularly as they pertain to the procedural history and to fundamental fairness issues raised herein.

On July 22, 2002 the County of Kankakee conducted a hearing on the Application of WMI for siting approval. At that time, counsel for WMI, citing WMI's failure to provide the required pre-filing service on some adjoining property owners, moved that the hearing be continued and rescheduled in November. (C-682). The siting hearing was then concluded without any evidence being taken. On July 29, 2002, WMI published a new Notice of Application for local siting approval, and on August 16, 2002, WMI submitted to Karl Kruse, Kankakee County Board Chairman, the "previously filed site location application" and other documents. (C-2372, 2372). WMI did not submit a new filing fee pursuant to the letter of transmittal referenced hereinabove.

The siting hearing on WMI's resubmitted Application commenced on November 18, 2002 and continued until December 6, 2002. After the close of the local siting hearing but before the County Board made its decision, this Board on January 9, 2003 reversed the unanimous siting approval previously granted by the Kankakee City Council in the Town & Country case, finding that the Applicant had failed to establish that the hydro-geologic setting (which is essentially similar to the WMI hydro-geologic setting) protected the public health, safety and welfare. (PCB 03-31, January 9, 2003). On January 31, 2003 the Kankakee County Board conditionally approved WMI's Application, and this appeal resulted. Although the PCB Hearing Officer in this case ruled that evidence regarding the adoption and amendment of the Kankakee County Solid Waste Plan is not relevant to the fundamental fairness of the proceedings, the Plan and its amendments are in the record. Town & Country Utilities argued in

its brief before this Board in PCB 03-31that the County's hasty amendments of its Solid Waste Management Plan in October, 2001 and March, 2002 were solely intended to pave the way for WMI to seek an expansion of its existing facility while simultaneously precluding the City of Kankakee from exercising its siting jurisdiction. (PCB 03-31).

Petitioner Karlock respectfully argues that the PCB Hearing Officer in this case, in excluding evidence relating to the timing and reasons for the two Solid Waste Plan amendments before the Town & Country and WMI Applications for siting approval were filed, misinterpreted this Board's ruling in Residents Against a Polluted Environment vs. County of LaSalle and Landcomp Corporation, PCB 96-243. In the Landcomp case, this Board found that evidence of a siting applicant's previous presence and input into the development of the county's Solid Waste Management Plan was not an improper ex parte contact, and was therefore not relevant to the fundamental fairness of the subsequent siting proceedings. What distinguishes Landcomp from the instant case, however, is that in Landcomp the applicant's previous involvement with the county on planning issues was both innocuous in nature and remote in time from the filing of the application for site location approval. In the instant case, the plain language of the Plan amendments themselves indicate an intent on the part of the County to approve the already contemplated WMI expansion and to oppose any siting application conducted under any other jurisdiction. Timing of the amendments in the instant case is also ominous in that the second Plan amendment was adopted the day before Town & County filed its Application for site location approval with the City of Kankakee and a little over two weeks before WMI filed its Application with the County. In light of the subsequent, obvious joint effort between Kankakee County and WMI in appealing the City of Kankakee's decision in the Town & Country case, all of which took place while WMI's competing Application was pending before the County

(creating a per se ex parte contact), the Board is asked to reconsider its Hearing Officer's ruling and recognize that in this case the County's Solid Waste Plan amendments were the vehicle for implementation of its joint venture with WMI. This Board should be mindful of the long history of disputes between neighboring political jurisdictions regarding landfill development; "As evidenced in the instant case no matter where a landfill is sited, neighboring units of local government not participating in the landfill's development will typically employ their considerable legal arsenal to prevent indefinitely the development of such facilities." (City of Elgin v. County of Cook, Village of Bartlett v. Solid Waste Agency of Northern Cook County, 169 Ill.2nd 53 at 70 (1996)).

## II. Standard Of Review

Section 40.1 of the Act requires the Board to review the proceedings before the local decision maker to assure fundamental fairness. In E & E Hauling, the Appellate Court found that although citizens before a local decision maker are not entitled to a fair hearing by constitutional guarantees of due process, procedures at the local level must comport with due process standards of fundamental fairness. The Court held that standards of adjudicative due process must be applied. (E & E Hauling, 451, N.E.2d at 564; see also Fairview Area Citizens Task Force (FACT) v. Pollution Control Board, 144 Ill.Dec. 659, 555 N.E.2d 1178 (3rd Dist. 1990)). Due process requires that parties have an opportunity to cross-examine witnesses, but that requirement is not without limits. Due process requirements are determined by balancing the weight of the individual's interest against society's interest in effective and efficient governmental operation. Waste Management of Illinois, Inc. vs. Pollution Control Board, 175 Ill.App.3d 1023, 530 N.E.2d 682, 693 (2nd Dist. 1988). The manner in which the hearing is

conducted, the opportunity to be heard, the existence of ex parte contacts, prejudgment of adjudicative facts, and the introduction of evidence are important, but not rigid, elements in assessing fundamental fairness. Hediger v. D & L Landfill, Inc. (PCB 900163, December 20, 1990)

While the determination of fundamental fairness is made on a de novo basis, the Board acts as an appellate body regarding the nine substantive criteria, confining its review to the record made before the local siting authority.

When examining a local decision on the nine criteria under Section 39.2 of the Act, the Board must determine whether the local decision is against the manifest weight of the evidence. McLean County Disposal, Inc. v. County of McLean, 207 Ill.App.3d 477, 482, 566 N.E.2d 26, 29 (4th Dist. 1991); Fairview Area Citizens Task Force v. PCB, 198 Ill.App.3d 541, 550, 555 N.E. 2d 1178, 1184 (3rd Dist. 1990); Harris v. Day, 115 Ill.App.3d 762, 769, 451 N.E.2d 262, 265.

The party seeking siting approval for a pollution control facility must submit sufficient details of the proposed facility to meet each of the nine statutory criteria. (Land and Lakes Company v. PCB, 319 Ill.App.3d 41, 743 N.E.2d 188 (3rd Dist. 2000)). All of the statutory criteria must be satisfied before siting can be granted. (Concerned Adjoining Owners v. PCB, 288 Ill.App.3d 565, 680 N.E.2d 810 (5th Dist. 1997)).

This Board for the first time reversed an affirmative local decision on the basis that the local finding on the public health, safety, and welfare criterion was against the manifest weight of evidence in County of Kankakee v. The City of Kankakee, PCB 03-31, January 9, 2003). In that case, the Board carefully scrutinized the evidence on both sides of the issue and seemed to give particular weight to the fact that the bedrock in close proximity to the proposed facility was

silurian dolomite, which is a major regional aquifer in Illinois. This decision would seem to raise the bar for all applicants regarding the sufficiency of their evidence regarding the safety of a proposed facility, but especially for applicants such as WMI in this case where they, too, plan to build a facility in direct proximity to the silurian dolomite aquifer.

## III. County Board Lacked Jurisdiction Due To The Fact That The Applicant Failed To Satisfy The Notice Requirements Of Section 39.2(b) Of The Act.

415 ILCS 39.2(b) provides in relevant part that, "no later than 14 days prior to a request for local approval the applicant shall cause written notice of such request to be served either in person or by registered mail, return receipt requested, on the owners of all property within the subject area not solely owned by the applicant, and on the owners of all property within 250 feet in each direction of the lot lines of the subject property ..." (Emphasis added). This requirement is mandatory. The record reflects and all parties are in agreement that Brenda Keller is a landowner entitled to notice under the aforesaid Section, and that she was not served. The issue was fully developed at the County siting hearing by Objector, Michael Watson, and Petitioner Karlock hereby adopts as his own the arguments on this issue in the Brief of Michael Watson.

By way of additional argument, Petitioner Karlock notes that it is of critical importance that no attempt was made to serve Brenda Keller either by registered or certified mail. (Cy. Hrg. Volume 28, Page 44). Instead, WMI argued that they unsuccessfully attempted personal service on several occasions, and presented in support thereof the testimony of their private process server, Ryan Jones. (Cy. Hrg. Volume 28, Page 5-56). The fact that Jones' attempts at service were unsuccessful is of no consequence and does not support the intended inference by WMI that Mrs. Keller was evading service. The testimony of both Brenda Keller and her husband,

Robert Keller, is unequivocal that the Kellers did not evade service, that they were home and available for service during the general time period when Jones allegedly attempted service, and that they were engaging in their normal routines during that time. (Cy. Hrg. Volume 28, Pages 58-99, 101-135). This is supported by the fact that the Kellers readily accepted certified mail service by WMI when it was attempted upon them in the earlier March, 2002 filing. (Cy. Hrg. Volume 28, Pages 62, 131).

Service as outlined in the statute is mandatory. The Appellate Courts have strictly construed this requirement. Ogle County Board v. Pollution Control Board, 272 Ill.App.3rd 184, 649 N.E.2d 545, (2nd Dist. 1995). While the Ogle County case leaves the door slightly ajar for those situations where the service requirement might be excused in the case of a property owner found to be evading service, no such evidence exists in this case. The failure of the Applicant to even attempt certified or registered mail service on Brenda Keller should conclusively answer the question of whether the Applicant did all it reasonably could do under the circumstances. All we have in this case is WMI's desire for a mandatory jurisdictional requirement to be excused because of the ineptness of its process server. That is not and should not be the law.

## IV. Filing Irregularities Prejudiced the Public And Rendered The Proceedings Fundamentally Unfair.

While there is no Board requirement that an applicant comply with applicable local siting ordinances or that siting jurisdictions enforce their own ordinances, the failure of applicants to comply with local siting ordinances and the acquiesces of siting jurisdictions in that noncompliance can lead to far reaching problems. Local siting ordinances exist presumably to provide the outline of an orderly process for siting proceedings and, more importantly, to insure

public participation by putting the public as well as applicants on notice of the manner in which the proceedings are to be conducted. Local siting ordinances not inconsistent with Section 39.2 of the Environmental Protection Act are both contemplated and approved by the courts. (Waste Management of Illinois v. PCB, 175 Ill.App.3d 1023, 530 N.E.2d 682 (2nd Dist. 1988)). Failure of a local siting jurisdiction to follow its own ordinance, particularly with regard to filing requirements is also powerful circumstantial evidence of predisposition and prejudgment by the local decision makers in favor of the applicant. That is certainly the case here.

Contrary to its originally expressed position of July 22, 2002, that its failure to notify all required property owners merely necessitated a continuance of the siting hearing, WMI now argues that it withdrew its first Application and refiled a second Application on August 16, 2002. It is clear, however, from the letter of transmittal with the second Application that it is merely a refiling of the original Application with updated notice information. (C-2371, 2372). WMI delivered its refiled Application to the County Board Chairman rather than to the County Clerk. They did not pay the required $250,000 filing fee upon said delivery, but rather asked that the filing fee from the withdrawn March 29th Application be accepted instead. Of course some of that initial $250,000 had been spent down, and WMI subsequently tendered an additional $108,000 to the County as a supplemental filing fee. (Cy. Hrg. Volume 2, Pages 18, 26; Also C-693-694). One gets the sense from the informality of the filing and tender of fees that things were being done between WMI and the County on a more private than public basis. This is supported by the fact that WMI's counsel's August 16th letter of transmittal did not come to light until after the siting hearings had begun in November. In response to a Freedom Of Information Act request for information regarding WMI's re-filing, specifically a request for any letters of transmittal or other evidence of the refiling, Brenda Gorski, an Assistant State's Attorney in

Kankakee County, indicated that no such information existed or could be found. (C-691-692). The public, therefore, had no idea what had occurred regarding the refiling until the actual siting hearings began, objectors started making motions regarding the irregularities, and responsive documents began to magically appear.

### A. WMI's Operating Record was Unavailable to the Public, Rendering the Proceedings Fundamentally Unfair.

Whether the documents required by the Act to be included with an application, particularly the Applicant's prior IEPA filings pertaining to the facility as required by 415 ILCS 5/39.2 (c), found their way to the County Clerk's Office for public inspection prior to the first day of the siting hearing is a matter of some debate between the parties. What is not debatable is that these IEPA filings (also referred to as the "operating record") were not available to the public prior to the beginning of the siting hearing. The Attorney for Petitioner Karlock tendered an Affidavit on the first day of the siting hearing indicating that the operating record had not been available to him in the County Clerk's Office despite a diligent inquiry and search. (C-659, 660). At her evidence deposition, the surprisingly forgetful Chief Deputy County Clerk, Esther Fox, who had participated with Attorney Mueller in the earlier fruitless search for the operating record, acknowledged that she could not dispute any of the statements in his Affidavit. (Bd. Hrg. Evidence Deposition of Esther Fox, Page 13). Mrs. Fox did, however, recall that there was a sign in the Clerk's Office advising the public of other locations where the Application and presumably the operating record could be viewed, but no such sign or copy thereof was ever offered into evidence in these proceedings.

While the operating record was "located" on the first day of the public siting hearing, public access to the same continued to be restricted. Charles Norris testified at the Board Hearing that he visited the County Clerk's Office during the second day of the siting hearings to examine the operating record and found that it contained a substantial amount of microfiche. However, no microfiche reader was available with which to view this portion of the record, nor was one made available to him upon his request. (Bd. Hrg. May 6, 2003, Pages 24-26). Norris testified that he then visited another location where the operating record was allegedly available, namely the Public Library in Bradley, and at that location the microfiche portions of the operating record were not present. (Bd. Hrg. May 6, 2003, Page 27).

WMI does not dispute any of the foregoing. Instead, they argue that Petitioner Karlock's Attorney and his expert consultant, Charles Norris, are sophisticated landfill siting hearing participants who knew how to, and in fact got, the operating record through other sources, and that therefore no prejudice resulted. This entirely misses the point since the public availability requirements so painstakingly carved out by the Board over the years are intended to protect the entire public, particularly those who are not experienced and sophisticated in landfill siting. This Board has held that there is a presumption of prejudice when the Application and other required filings are not available to the public. (American Bottom Conservancy v. Village of Fairmount and Waste Management of Illinois, Inc., PCB00-200, October 19, 2000). The unavailability to the public of materials required to be filed as part of the siting application is fundamentally unfair. (Residents Against A Polluted Environment and The Edmund B Thornton Foundation vs. County of LaSalle and Landcomp Corp. PCB96-243).

However, in this case, the County's failure to make available to the public prior to the commencement of the siting hearing copies of the Applicant's IEPA filings was material and

more than a technical oversight. A great deal of the substantive testimony at the siting hearing concerned the hydrogeologic characterization and monitoring of the existing facility at the site as well as groundwater contamination believed by some to be originating from the existing facility. Those IEPA filings can be fairly summarized as, at a minimum, evidencing an on-going dialogue between WMI and the Environmental Protection Agency regarding whether or not monitoring well exceedances at the existing facility constituted evidence of groundwater contamination resulting from leachate migration. Having the entire record of that dialogue available prior to the hearing would have been completely essential for a full and fair hearing on the issue. Contrary to WMI's assertion that there was no prejudice because Charles Norris obtained the operating record prior to the beginning of the hearings, Norris in fact testified that he could not do a complete review of that record, in that quarterly groundwater monitoring reports to the Agency from the existing facility were on microfiche which he never obtained. (Cy. Hrg. Volume 23, Page 18).

Without all of the required documents being available to all of the public prior to the commencement of the public hearing, a fundamentally fair hearing could not occur and any decision on substantive criteria covered in those documents, particularly as they relate to public, health, safety and welfare is flawed and cannot be allowed to stand.

### B. Failure of the Application to Contain Required Information Rendered the Siting Hearing Fundamentally Unfair.

The siting hearing was further rendered fundamentally unfair by the fact that the siting Application was not administratively complete nor ever certified as such, and that they

Application, in fact, failed to contain material information required in the County's Regional Pollution Control Facility Siting Hearing Ordinance. While the Ordinance is reproduced in Volume 1 of WMI's siting Application, Subsection E entitled "Date of Filing" is omitted from the text. (Cy. Hrg. Volume 18, Page 109). This Subsection requires a certification on the part of the County that the Application is administratively complete before it can be deemed to have been filed. Christopher Rubak, the WMI representative responsible for making sure that the County's filing requirements were complied with, testified that he never received any certification of completeness nor notice of incompleteness from any County representative in connection with the Application filing (Cy. Hrg. Volume 18, Page 110).

The foregoing becomes more than a mere technical oversight when one realizes that WMI's siting Application was, in fact, incomplete, failing to contain significant required information. Subsections H(2)(c) and (d) of the County Siting Ordinance require substantial detail with regard to closed facilities owned or operated by any Applicant. These requirements were reviewed with Mr. Rubak during his testimony, and he acknowledged that the information required was not included with the Application and by way of explanation, opined that WMI simply chose not to include the same because it would have been too voluminous. (Cy. Hrg. Volume 18, Page 100, 101).

Not only did the absence of required information in the Application effectively prevent the public from being able to inquire regarding the same, but the County's acquiesce in this omission suggests a lack of interest that could only result from the fact that the ultimate issue was pre-decided. WMI's refusal and, in some cases, overt unwillingness to comply with the

requirements of the local siting ordinance and the decision maker's refusal to enforce that siting ordinance demonstrate collusion between the County and WMI and rendered the proceedings fundamentally unfair.

## V. The County And WMI's Actions, Both Before And After The Filing Of The Siting Application, Demonstrated Collusion And Pre-Determination Of The Issues.

Before the Application for siting approval was ever filed, WMI and Kankakee County had a joint plan of action to grant siting approval for a WMI expansion and to oppose any facility sited by the City of Kankakee. This collusive joint plan differs from that alleged in the Residents Against A Polluted Environment case (PCB 97-139) in that here the evidence of collusion is not circumstantial, but exists in the words and deeds of the co-conspirators. The first amendment of the County Solid Waste Plan on October 9, 2001 contains a finding by the County Board that, "the present landfill and its owner have served the County and its residents well for 27 years" and that "the expansion of the present landfill would meet the needs of the residents of the County for waste disposal generated within the County for many years." (C-701). Worst of all, the County Board in this Resolution went on to find, without having heard any evidence regarding the merits of the proposed expansion that, "the expansion of the current landfill would have positive impacts on the County ..." This is nothing short of an unequivocal legislative finding about the merits of a siting application not yet filed. Moreover, the County Board found in this Resolution that, "A second landfill would have negative impacts on County residents near the facility ..."

This sentiment was reiterated in the second amendment to the County Solid Waste Management Plan adopted the day before Town & Country filed its siting Application with the

City of Kankakee where the County now found that, "A second non-contiguous landfill would have impacts upon County residents located near any such proposed new facility." (C-703). Kankakee County, in other words, committed itself legislatively to oppose any new landfill other than expansion of the existing WMI facility. How did the County Board know before reviewing siting Applications and hearing evidence that expansion of the WMI facility would be good, and that any other proposed facility would be bad?

In the meantime, WMI's representatives were in the thick of this process. WMI's Division Vice-President, Dale Hoekstra, wrote a letter on January 7, 2002 to every Kankakee County Board member stating in pertinent part that, "We have also confirmed our obligation to provide a full and complete defense for the County in the event its Solid Waste Management Plan is legally challenged, and furthermore, a legal challenge of this type will not impede our ability to expand our existing facility." (C-709). On March 11, 2002, the day before the County's second amendment of its Solid Waste Management Plan, Hoekstra once again wrote to every County Board member advising them that Waste Management representatives have informed the Board in the past, "We relief in good faith on the October 9, 2001 Resolution during the final negotiations that led to the amended Host Agreement" and "as we have informed the County Board in the past, Waste Management is prepared to take a leadership role in defending against any legal challenge to the County's one landfill Solid Waste Management Plan and contesting any other landfill development because it would be inconsistent with the County's Solid Waste Plan." (C-711). Kankakee County then retained both legal and technical consultants to assist it in its opposition to the Town & Country Application pending before the City of Kankakee. Bills to the County for these services were in excess of $100,000 as of

November 18, 2002, well before the bulk of the work in the Town & Country appeal was performed. (C-698, 699; Also C-717-795).

At some point, WMI and the County and their consultants got so busy working together for their "common good" that they apparently lost sight of who was representing whom. As a result, we see all of the invoices for legal services from Hinshaw & Culbertson, the legal representatives for Kankakee County, from May 20, 2002 through September 30, 2002 being addressed to:

Kankakee County Landfill
Ed Smith
450 East Court St.
Kankakee, IL 60901-3992 (C-699)

Ed Smith is the State's Attorney of Kankakee County. The invoices of Hinshaw & Culbertson further reveal that they worked for the County on solid waste planning issues, the opposition to Town & Country's Application, and the pending WMI Application. Some of the work performed by Hinshaw & Culbertson in opposing the Town & Country Application pending before the City of Kankakee was directly indicated on the invoices as being "chargeable to waste siting filing application fee." (C-699, 718, 719, 781, 783).

The County can argue that the foregoing is a mistake, but it is still a fact and mistakes are often the most telling evidence of a party's true intentions. The Board is asked to apply the same reasoning it used in Concerned Citizens for a Better Environment vs. City of Havana and Southwest Energy Corporation, PCB 94-44, May 19, 1994) where it found great fault with the hearing officer sending her invoices directly to the siting applicant. The Board in that case did

not find that the hearing officer was, in fact, biased, but was critical because the extensive contacts between the applicant and the hearing officer showed a "continued disregard on the part of the applicant and the City of Havana for adjudicatory due process." (94-44 at page 12).

Common sense in this case dictates that neither Kankakee County nor WMI had any real concern about adjudicatory process, nor that they made any real attempt to hide their collusive behavior. The amendments of the Solid Waste Plan, finding even before an application was filed that the WMI expansion would be beneficial, the parties' mutual disregard for the local siting ordinance requirements, the parties' joint efforts while WMI's Application was pending to oppose the Town & Country siting Application, and the County's Attorneys' billing practices all lead to the inescapable conclusion that the proceedings were fundamentally unfair.

## VI. The County's Decision That The Proposed Facility Is So Located, Designed, And Proposed To Be Operated As To Protect The Public Health, Safety And Welfare Was Against The Manifest Weight Of The Evidence.

### A. Statement of Facts

Joan Underwood, a licensed professional geologist employed by WMI's consultant, Earthtech, testified regarding the geologic and hydro-geologic investigation at the site. (Cy. Hrg. Volume 19, Pages 81, 82). She described three geologic layers at the site, the silurian dolomite bedrock overlain by unconsolidated glacial materials from the Wedron group and the Mason group. (Cy. Hrg. Volume 19, Page 101). She described the glacial materials as being generally fine-grained and having lower permeability than a recompacted clay liner. (Cy. Hrg. Volume 19, Page 105). The silurian dolomite bedrock is considered the uppermost aquifer beneath the site. (Cy. Hrg. Volume 19, Page 93). She opined that the uppermost aquifer was probably 200 feet deep, but acknowledged that in past studies and permit modifications, WMI had characterized

the aquifer as being only ten feet deep and referred to the portion of the bedrock above the top ten feet as the "lower confining unit." (Cy. Hrg. Volume 19, Page 128, 130). No soil borings were done that completely penetrated the entire uppermost aquifer. (Cy. Hrg. Volume 19, Page 135).

Although Ms. Underwood identified the geologic materials above the bedrock as being mainly fine-grained clay, she did identify two major sand bodies at the site which would be separately monitored along with the uppermost aquifer. (Cy. Hrg. Volume 19, Page 111). She did not believe that the sand body on the eastern portion of the site extended all the way to the nearby Iroquois River. (Cy. Hrg. Volume 19, Page 104).

Ms. Underwood indicated that the facility would be an inward gradient facility, but that the base excavation grades on the southern portion of the site had to be lowered in order to maintain the inward gradient. (Cy. Hrg. Volume 19, Page 107).

Andrew Nickodem, an engineer, also employed by Earthtech who has also worked in-house for WMI for four years, described the design of the facility. (Cy. Hrg. Volume 11, Pages 56, 57; Volume 12, Page 9). The site consists of an existing facility, portions of which have a recompacted clay liner and portions of which are entirely unlined. (Cy. Hrg. Volume 12, Pages 20, 21). The expanded facility was proposed to overlay the existing facility although the engineering drawings with the Application did not contain scaled details showing the liner system associated with the overlay. (Cy. Hrg. Volume 12, Page 69).

Otherwise, Mr. Nickodem described a fairly standard composite liner system for the new facility with three feet of recompacted clay and a 60 ml. HDPE liner. (Cy. Hrg. Volume 11, Page 71). He acknowledged that this equaled Illinois' minimum standards for composite landfill liners. (Cy. Hrg. Volume 12, Page 11). He did not know the minimum State standards for

composite final covers, so he couldn't say whether the designed final cover exceeded those standards or not. (Cy. Hrg. Volume 12, Page 55).

Nickodem indicated that the hydrogeologic investigation was performed before his design, and that he relied on the low permeability clay underneath the liner. (Cy. Hrg. Volume 11, Pages 63, 70). The facility would have an inward gradient, but the base grades in Cells 9 and 10 at the south had to be lowered to maintain that inward gradient. (Cy. Hrg. Volume 12, Page 44). Nickodem acknowledged that he had not previously designed an inward gradient landfill, but pointed out that he had worked in construction on one. (Cy. Hrg. Volume 12, Page 82).

Nickodem's design proposed to re-circulate leachate at the facility, turning it into a bio-reactor. (Cy. Hrg. Volume 12, Page 50). He acknowledged, however, that leachate re-circulation was not yet completely understood. (Cy. Hrg. Volume 12, Page 53).

Charles Norris testified on behalf of Merlin Karlock that he is a professional licensed geologist in the State of Illinois who has evaluated numerous landfill siting applications. (Cy. Hrg. Volume 24, Page 21). He pointed out that the Application contained insufficient data for permitting with the principal deficiency being that head data (observation well water levels) needed to be obtained for all four seasons rather than just for a single time period. (Cy. Hrg. Volume 23, Pages 18, 19). He opined that attempts to assess site performance without seeing the variations in four quarters of data are useless. (Cy. Hrg. Volume 23, Page 20).

Norris found the geology at the site not unexpected and typical of the northern quarter of the Illinois silurian dolomite bedrock group. (Cy. Hrg. Volume 23, Page 27). Silurian dolomite is a heavily used aquifer. (Cy. Hrg. Volume 25, Page 67). A high percentage of the population in the area uses the silurian dolomite aquifer. (Cy. Hrg. Volume 24, Page 104). He pointed out

that the proposed WMI site and the nearby Town & Country site sit on top of the same aquifer, and he would expect a great number of geologic similarities between the two. (Cy. Hrg. Volume 25, Pages 59, 60, 88).

Mr. Norris observed that the geometries and geologic data at the site suggest the presence of sink holes or solution cavities underneath the site, which need to be taken into consideration in all engineering calculations. (Cy. Hrg. Volume 23, Page 37). He pointed out a number of examples including Boring B-150 which shows wash-out or voids consistent with dissolution activity, the existence of residual Pennsylvanian deposits in the topographic bedrock lows at the site, and the highly channelized groundwater flow which is a-typical of most aquifers. (Cy. Hrg. Volume 23, Pages 32, 40, 44).

Mr. Norris was highly critical of Joan Underwood's use of laboratory permeability data rather than field data in the groundwater impact assessment. He pointed out that the lab data suggested permeabilities thousands of times lower than the field data, that fracture flow is not represented in intact cores tested in the lab, and that laboratory permeability testing does not consider the effect of secondary system flow from small scale fractures and sand lenses. (Cy. Hrg. Volume 23, Pages 50-59). Norris concluded that the slug test permeability data reported by the Applicant is far more representative of the true permeability of the till than the laboratory test results used in the groundwater impact assessment.

Mr. Norris suggested that a water balance calculation be done as a reality check on the assumptions a hydro-geologist uses. (Cy. Hrg. Volume 23, Page 26). Norris performed such a water balance and calculated that WMI's Application severely underestimated the volume and the rate of water movement through the so-called fine-grained materials to the aquifer, and that it severely overestimated the time for water to move downward to the silurian dolomite. (Cy. Hrg.

Volume 23, Page 59). This is verified by the similar amplitudes in seasonal head changes between deep and shallow observation wells in the old part of the site which are indicative of a highly connected system. (Cy. Hrg. Volume 23, Page 96). This is further verified by the fact that at least two deep monitoring wells at the existing site have shown agricultural chemicals in the uppermost aquifer, and that these chemicals could not possibly have reached the aquifer yet if the glacial materials were as impermeable as described and modeled by Ms. Underwood. (Cy. Hrg. Volume 23, Page 69).

Mr. Norris' review of the data, particularly the portion of the operating record data to which he had access, led him to conclude that leachate from the existing site has for some time been contaminating surrounding groundwater. He cited a 1990 review of monitoring data by Hydrosearch which ruled out landfill gas as the source of contamination. (Cy.Hrg. Volume 23, Page 71; Karlock Exhibit #16; C-856-860). While the occurrence of landfill gas in deep monitoring wells suggests a large, interconnected flow system and is consistent with preferred pathways that will let leachate migrate away from the site, the amount of contamination is so great that only leachate, and not gas, can be the cause of contamination in monitoring wells such as 13-D and 14-D. (Cy. Hrg. Volume 23, Pages 70-78; Karlock Exhibit #15;C-851-855).

In rebuttal, Terry Johnson, an in-house hydro-geologist employed by WMI and not licensed in Illinois, testified that 15 monitoring wells at the existing site are sampled four times per year as required, and that these results are submitted to the IEPA. (Cy. Hrg. Volume 26, Pages 58, 63, 69, 86). He complained that Illinois statistical ranges for monitoring exceedances are too tight and don't reflect normal ranges, and that as a result landfills in Illinois typically have very high false positive rates. (Cy. Hrg. Volume 26, Pages 66, 71). He concluded that the increases in groundwater contamination observed at the site are not attributable to leachate, and

that the presence of landfill gas in monitoring wells does not threaten the surrounding environment. (Cy. Hrg. Volume 26, Pages 76, 84).

On further rebuttal, Joan Underwood stated she did not believe that solution formations exist underneath the site. (Cy. Hrg. Volume 27, Page 17). She also calculated groundwater velocity in the aquifer at .01 feet per year, but acknowledged that in her equation she used a permeability one thousand times lower than the actual permeabilities measured at the site by the slug tests. (Cy. Hrg. Volume 27, Pages 31, 41).

## B. Argument

### (1) The in situ materials do not provide an effective barrier between the waste and the silurian dolomite aquifer.

The fine-grained glacial materials on which the Applicant relies to provide an effective natural barrier between the waste and the major regional aquifer do not have the quality and do not exist in the quantity which the Applicant's represents. By using the result from tightly controlled laboratory permeability tests rather than their own field scale slug tests, WMI underestimates the permeability of these materials by a factor of up to ten thousand. The fine-grained materials described by Ms. Underwood are generally described as the Wedron Till. However, a close examination of the soil boring logs consistently demonstrates that the Wedron Till is not homogenous, that the deposits and thickness of this Till are irregular, and that the same is interspersed with many discontinuities and sand. More importantly, the discontinuities and sand bodies increase with depth, meaning they increase at the very point where this Till is relied upon as a natural barrier between the waste and the aquifer.

The siting Application has some good and valuable data, namely the slug test results which typically show permeabilities in the Wedron Till in the range of 1 x 10 -4 cm/second and 1 x 10 -5 cm/seconds, figures consistent with what one would expect from an unconsolidated, discontinuous and heterogenous glacial till. (Cy. Hrg. Volume 20, Page 70). While conceding the point, Ms. Underwood, however, continued to use the much lower matrix permeabilities derived from laboratory tests of very small intact samples of pure Wedron Till in her calculations and models.

Moreover, the slug test permeabilities, while far more accurate than the laboratory test results, probably also significantly underestimate actual permeability in the areas that are of relevant concern, because half of the slug tests performed in the Till were in areas identified as pure clay. (Cy. Hrg. Volume 21, Page 82). Little, if any, pure clay exists in the lower portion of the Till. (Cy. Hrg. Volume 21, Pages 81, 82). This is compounded by the fact that the soil boring logs uniformly reflect less material recovery closer to the bedrock interface. (Cy. Hrg. Volume 21, Page 87). Poor recoveries can only be associated with less cohesive material such as sand or gravel or with less reliable soil classifications.

If WMI argues that the use of laboratory permeability results are more appropriate than the field scale slug test results because of inherent differences between vertical and horizontal permeability in the material, one need only point out that unlike rock which is deposited in strata or layers, churned up glacial materials are too heterogeneous to have inherent differences between horizontal and vertical permeability. Mr. Norris pointed out this was specifically true for materials such as the Wedron Till identified at the site. (Cy. Hrg. Volume 23, Page 54).

That notwithstanding, Ms. Underwood presented and modeled the Wedron Till as being significantly less permeable that the proposed recompacted clay liner proposed in the design and required by the State. (Cy. Hrg. Volume 23, Page 28).

Compounding their error, WMI's experts grossly overestimated the amount of this so-called "fine-grained material" at the site. Ms. Underwood testified that there was an average of sixteen feet of this material underneath this site, (Cy. Hrg. Volume 20, Page 63), but that is complete misleading. On cross-examination, she admitted that at boring locations B-111 and B-141, there was only three feet of clay between the bottom of the proposed liner and the bedrock aquifer. (Cy. Hrg. Volume 20, Page 96). At boring location B-120, there was only three and one-half feet of clay separating the liner and the aquifer. (Cy. Hrg. Volume 20, Page 95). At boring location B-132, the bedrock aquifer was within two to three feet of the bottom of the proposed excavation. (Cy. Hrg. Volume 20, Page 85). Even that two to three feet of supposed clay is illusory because a closer look at the soil boring log for B-312 shows that there was no recovery at all for the last two feet sampled before the auger hit bedrock. In other words, there was no material recovered to classify, yet Ms. Underwood admitted that she chose, nonetheless, to call this two feet of nothing "clay." (Cy. Hrg. Volume 20, Page 86). Ms. Underwood also ultimately conceded that poor recoveries can occur due to the materials being loose and discontinuous. (Cy. Hrg. Volume 20, Page 90).

The implications of the paucity of good quality clay between the bottom of the proposed liner and the top of the aquifer are staggering. To the extent that Ms. Underwood admitted using sixteen feet of clay in her groundwater impact assessment model, (Cy. Hrg. Volume 20, Page 63), she has not modeled a worst case scenario or even the worst case conditions found at a number of locations on the site. In addition, Andrew Nickodem, the design engineer, testified

that he assumed in his design a minimum of eight feet of impermeable clay between the bottom of the liner and the aquifer. (Cy. Hrg. Volume 12, Page 54).

Even a cursory review of other readily available site data belies WMI's conclusions about the quantity and quality of impermeable Till at the site to protect the environment. At the southern portion of the site, the vertical gradients between the surface water table and the dolomite aquifer are minimal, and such minimal vertical gradients were conceded by Ms. Underwood as being consistent with good flow or good hydraulic connection between the two units. (Cy. Hrg. Volume 20, Pages 78, 79). In addition, Ms. Underwood conceded that seasonally changing water levels in the deep observation wells would be consistent with those wells being recharged from the ground surface. (Cy. Hrg. Volume 20, Page 44). Mr. Norris pointed out that the Application lacked time series head data in the new soil borings and observation wells, and that this data would easily have allowed a determination of whether or not deep wells show the seasonal variation which evidences their hydraulic connection to surficial units. (Cy. Hrg. Volume 23, Page 18). Seasonal head data was, however, available for the existing facility, as that data has been submitted periodically to the IEPA in connection with various permit modifications. Karlock's Exhibits # 7.8, 7.9 and 7.10, utilizing data from the existing facility deep monitoring wells, prove that not only is there seasonal water level variation in these wells, but the variation is similar in amplitude to the seasonal variation in the corresponding shallow wells, thereby confirming the direct and rapid hydraulic communication between the shallow and deeper water zones. (Cy. Hrg. Volume 23, Page 81; C-821-825).

Because some of the groundwater monitoring results from the existing facility are stored on microfiche, not all of this data was available to Mr. Norris. However, the available data leads to the inescapable conclusion that the regional bedrock aquifer underneath the existing facility

has been impacted and contaminated by releases from that facility. This further serves to demonstrate that the glacial tills underneath the site do not act as an effective barrier to contaminant migration. While WMI disputes Mr. Norris' conclusion that groundwater has been contaminated by leachate from the existing facility, they have acknowledged that fugitive gas from the existing facility may have caused the problem. (Cy. Hrg. Volume 23, Page 76). Regardless of whether one believes Mr. Norris' conclusions regarding leachate releases, no one disputes his perhaps more important conclusion that the existence of contaminated fugitive gas in the bedrock aquifer deep underneath the existing facility is a serious problem in and of itself proving that the gas has been drive downward by pressure through preferred migration pathways. (Cy. Hrg. Volume 23, Page 78). The existence of landfill gas in monitoring wells significantly below the bottom of waste in the existing facility stands in sharp contrast to Mr. Nickodem's testimony that landfill gas will not typically move into deeper groundwater. (Cy. Hrg. Volume 14, Page 60).

As outlined in the Statement of Facts, Charles Norris proposed a mass water balance calculation as a way of checking the quality and reality of permeability assumptions. Ms. Underwood did not do a water balance. (Cy. Hrg. Volume 22, Page 45). Norris concluded that, at a minimum, fifty-two times more water is leaving the flow system than the Application describes. (Cy. Hrg. Volume 23, Pages 66-69).

**(2) The inward hydraulic gradient is not sufficiently established or understood.**

In her groundwater impact assessment, Ms. Underwood modeled only for diffusion as the leachate transport mechanism, and did not even consider the possibility of outward advective flow from the facility. (Cy. Hrg. Volume 21, Page 33). This was premised upon her belief that

the facility has an inward hydraulic gradient where there is no possibility of outward leachate flow from the facility, only the possibility of groundwater flow into the facility. While the evidence suggests that there is an inward gradient at some parts of the proposed facility, the degree of that gradient is not well understood and the assumption that the gradient can be maintained on a long term basis is entirely dubious, at best.

Andrew Nickodem, the design engineer, testified that to ascertain the inward gradient and for engineering calculations and design purposes, he used the water levels in the silurian dolomite aquifer as depicted on the potentiometric surface map of the dolomite well heads in the Applicant's engineering drawing 17 in the Application. (Cy. Hrg. Volume 12, Pages 41, 42). Based upon this, the base grades for the top of the liner were significantly lowered in the two southernmost cells. (Cy. Hrg. Volume 12, Page 40). Nickodem further used the dolomite water levels to compute the potential for hydrostratic uplift pressure during and after construction. (Cy. Hrg. Volume 12, Pages 41-43). Since the proposed landfill is to be built in the Till rather than in the dolomite aquifer, Nickodem's use of the dolomite aquifer water levels to compute hydrostratic uplift and other engineering requirements is somewhat counter-intuitive. This Board recently rejected similar analysis involving the same regional aquifer when it found in County of Kankakee vs. The City of Kankakee, et al that "the effectiveness of the inward gradient is compromised when the aquifer lies below the foundation of the landfill." (PCB 03-31, January 9, 2003 at Page 27).

Not surprisingly, Nickodem's understanding of the inward gradient was contradicted by Ms. Underwood who testified that the inward gradient is based upon the water levels in the water table. (Cy. Hrg. Volume 20, Page 13). Aside from the troubling questions this contradiction raises about the efficacy of Nickodem's design, an inward gradient based upon water table heads

would require an understanding of the flow directions in the water table. However, Ms. Underwood never did prepare, nor does the Application contain, potentiometric surface maps for the water table, or for the Wedron Till, the actual geologic unit in which the base of the landfill will sit. Nickodem did acknowledge that comparing and contrasting the potentiometric surfaces in the water table and in the Wedron Till to that in the dolomite aquifer would enhance understanding of the hydraulic inter-relationship between the respective units. (Cy. Hrg. Volume 20, Pages 14-16). Joan Underwood further contradicted Mr. Nickodem by pointing out that although she didn't prepare a potentiometric map of the clay unit at the base of the liner, the correct water levels or heads to use for engineering calculations are the ones in the Wedron clay unit. (Cy. Hrg. Volume 20, Pages 15, 16). To make matters worse, she went on to point out that if one used the water levels in the dolomite wells to establish the inward gradient, there would be no inward gradient at landfill liner contours above the 626 elevation in the northeast portion of the proposed site. (Cy. Hrg. Volume 20, Page 66).

Given the troubling fact that WMI's two principle experts don't agree on what the inward gradient is or how it is to be measured, evaluation of whether that gradient can be maintained seems premature and altogether speculative. That notwithstanding, the groundwater high in the upper most aquifer is located at boring B-115 which is in the approximate geographic center of the proposed site. (Cy Hrg. Volume 20, Page 56). Ms. Underwood could not identify a higher elevation off-site from which the dolomite at B-115 could be recharging and did ultimately concede that the bedrock at this point appeared to be recharged from the ground surface. (Cy. Hrg. Volume 20, Page 44, 61). Building the landfill over this groundwater high point cuts off recharge from the surface which will cause down gradient heads to drop, thereby further compromising the inward gradient.

Although Andrew Nickodem and Joan Underwood work in the same office, it is apparent that they failed to communicate effectively on this project. Did Mr. Nickodem decide not to design a composite liner that exceeded State minimum specifications because he believed there was a minimum of eight feet of low permeability clay underneath the liner? Are Mr. Nickodem's engineering calculations dangerously flawed because he used the wrong water well levels in those calculations? Answering these questions is the burden of WMI, and the failure to answer these questions is conclusive on the issue of whether WMI has submitted sufficient evidence to establish that the facility is so located and designed as to protect the public health, safety, and welfare. What little confidence there is left is Nickodem's conclusions evaporates when one realizes that he had no understanding of the State requirement that there be no more than one foot of leachate on the liner. Mr. Nickodem did not know whether this requirement applied to the highest or lowest portion of the liner, and this is significant in light of the fact that the liner in each cell typically is a drop in elevation from its high point at the East of the cell to the sump at the West end of the cell of approximately fourteen feet. (Cy. Hrg. Volume 12, Page 38). The point becomes critical since Mr. Underwood acknowledged that as little as six feet of leachate on the liner at its southeast portion would reverse the inward gradient in that area. (Cy. Hrg. Volume 21, Page 35).

**(3) The groundwater monitoring program is based upon an incomplete and flawed understanding of groundwater flow at the site.**

The only groundwater flow map presented in the Application is drawing 17 which presents the potentiometric surface of the silurian dolomite aquifer. Besides the sand bodies at the east and south sides of the site, this is the only unit proposed to be monitored. In developing

the potentiometric surface of the silurian dolomite aquifer, Ms. Underwood intentionally chose to exclude data from pre-existing dolomite monitoring wells G10D, G12D and G26D. (Cy. Hrg. Volume 20, Page 19). She explained her omission by describing the heads in those wells as not being "representative." (Cy. Hrg. Volume 20, Pages 20, 23). However, these wells were deemed to be sufficiently "representative" to be part of the monitoring program at the existing site, and to be included in all groundwater flow maps previously tendered to the IEPA in connection with significant permit modification applications. (Karlock Exhibit # 3; C-802). On the other hand, Ms. Underwood included water levels to existing facility monitoring wells (28D and 29D which were taken seven years prior to development of the rest of her data). (Cy. Hrg. Volume 20, Page 30). When pressed, she did acknowledge that using geologic data from different times and dates is not usually done and is not a good practice. (Cy. Hrg. Volume 20, Page 31). Ms. Underwood also conveniently ignored water level data from one of the new observation wells (B103 Comp) developed in connection with investigation of the proposed expansion. (Cy. Hrg. Volume 20, Page 49).

Charles Norris was highly critical of the proposed groundwater monitoring system calling it "problematic." (Cy. Hrg. Volume 23, Pages 96, 97). Due to the changes in heads and flow in the aquifer resulting from the cut-off of recharge in the groundwater high after the site is developed, the current proposed positioning of monitoring wells is in no way guaranteed to be correct in the future. (Cy. Hrg. Volume 23, Page 92). As previously discussed, lowering of the aquifer heads by cutting off recharge to the current groundwater high point at the center if the site would also have the secondary effect of reducing the already speculative inward gradient. Also, despite the fact that potentiometric surface maps of the existing facility previously submitted to the IEPA demonstrate a-typical channelized groundwater flow in the aquifer, Ms.

Underwood proposes two of the down gradient monitoring wells in the silurian dolomite aquifer on the east side of the site to be fifteen hundred feet apart. (Cy. Hrg. Volume 21, Page 42). Given the sudden and unexpected discontinuities and sand bodies encountered at the site and the possibility of solution channels, this is an impossibly large interval, particularly since general flow from the groundwater high in the middle of the site is toward this gap in the monitoring wells.

Moreover, the monitoring program does not account for the downward gradient observed in all four locations where both shallow and deep wells were installed in the aquifer. This downward gradient could only result in contaminants traveling downward in the aquifer below the monitoring horizon. (Cy. Hrg. Volume 23, Page 97). A similar omission was condemned by this Board in County of Kankakee vs The City of Kankakee, et al, (PCB 03-31, January 9, 2003 at Page 27) when the Board found Town & Country's modeling and groundwater impact evaluation, "failed to measure vertical flow of contaminants in the silurian dolomite aquifer."

Ms. Underwood's exclusion of data used in all previous applications to the IEPA in connection with the existing site, and her inclusion of data from completely different time periods allows her to map the groundwater flow in the aquifer as somewhat more predictable than her peers at Rust Engineering (now Earthtech) had previously argued to the IEPA. The position of WMI's former hydrogeologist exactly corroborates Mr. Norris' conclusion that groundwater in the aquifer under the existing site is subject to strong, localized, channelized flow. (Karlock Exhibit #4; C-803, 804). At the siting hearings, Ms. Underwood dismissed and disagreed with this conclusion. (Cy. Hrg. Volume 21, Page 39).

Mr. Norris demonstrated that using all of the available monitoring data from the existing facility confirms the strong, localized groundwater flow at the existing facility. (Cy. Hrg.

Volume 23, Page 45). He also pointed out that the existence of such other channelized flow under the much larger proposed expansion site is unknown, but certainly should be suspected. The evidence raises a strong possibility of solution channels in the dolomite at elevation 575 MSL (approximately twenty-five feet below the top of bedrock). Ms. Underwood acknowledged that residual shale was present at elevation 576 in boring B-103 and that there was spontaneous bore hole widening observed at elevation 577 and 575 in borings B-150 and B-152, respectively. (Cy. Hrg. Volume 20, Pages 49, 52, 53). Mr. Norris also reviewed this data and concluded that it most likely represented a solution channel in the dolomite which needed to be confirmed or ruled out for purposes of establishing correct monitoring well locations. (Cy. Hrg. Volume 23, Pages 37-41).

**(4) The Groundwater impact assessment is based on such erroneous assumptions that it is of no value.**

WMI's ultimate conclusion, namely that the facility is so designed, located and proposed to be operated so that the public health, safety and welfare will be protected is based upon the results of a groundwater impact assessment conducted under the supervision of Joan Underwood. The groundwater impact assessment is nothing more than a computer simulation, and like all computer simulations, the qualify of the outputs can be no better than the quality of the inputs. Ms. Underwood claimed that she had performed a worst case analysis model run, but the results of that run are not reported in the Application. Instead, the Application contains only the "average case." Whether a "worst case" scenario passes is, therefore, completely speculative. The only modeling evidence that the County Board had to review, and the only modeling evidence that this Board can look at, is the evidence presented in the Application.

The modeling evidence presented in the groundwater impact assessment in the Application is worthless because it does not, in any way, represent conditions actually encountered at the site. Ms. Underwood modeled the thickness of the Till underneath the liner as sixteen feet, when in fact the soil borings demonstrate that at a number of locations the thickness of the Till between the bottom of the liner and the aquifer will be three feet or less. This Brief has also made previous reference to the inappropriateness of modeling the permeability of the Till based upon laboratory tests which measure only matrix permeability rather than the slug test results which would take into account secondary permeability features actually existing in the materials tested. The permeabilities obtained in the laboratory tests for the Wedron Till are approximately 3000 times lower than the permeabilities actually observed in the field. In some cases, the slug tests show permeabilities 10,000 times greater than the laboratory matrix permeability results. (Cy. Hrg. Volume 21, Pages 30, 31).

The computer program used for the groundwater impact assessment requires separate input parameters for the permeability of the recompacted clay and the 60 ml. HDPE liner which comprise the composite liner. Ms. Underwood chose to use a figure averaging both of these components together with the result that the three feet of recompacted clay is modeled as being 4500 times less permeable than what WMI's engineer said could be achieved. (Cy. Hrg. Volume 21, Pages 31, 32). Averaging the very low permeability of the plastic component of the composite liner with the recompacted clay portion is extremely misleading and skews the calculated result because the lower permeability in the recompacted clay will result in drastically reduced travel times through the clay. Even though the 60 ml. plastic sheet is usually assigned a separate permeability value, in that case the value does not represent travel time through the plastic sheet, but rather an estimation of the total flux through the plastic sheet based upon the

assumed number of pin hole defects. The true permeability of the plastic portion of the composite liner is zero in those places where there are no defects, and 1.0 (meaning contaminants pass through instantly) in those areas where there are actual defects. Since leachate travels through the plastic liner defects more or less instantaneously, it becomes critical to know the true permeability of the recompacted clay for accurate modeling purposes. Ms. Underwood, by averaging the permeability of the plastic and the clay, has effectively played a mathematical trick which slows down the computed travel time by a factor of 4500.

**(5) WMI's non-conservative approach to monitoring well exceedances at the existing facility negatively impacts its credibility.**

WMI included in the Application a summary of the current groundwater assessment status for the existing facility. (Siting Application Volume 1, Table 2-3). The Table lists thirteen specific monitoring well exceedances presently at issue. In each case, WMI argues that the exceedance is not attributable to leachate releases from the existing facility. The conservative approach should be that when there is a monitoring well exceedance, the operator should assume the worse until it is disproven. Instead, the referenced Table as well as the operating record history testified to by Mr. Norris indicates a pattern where WMI will do almost anything to avoid acknowledging any responsibility for an exceedance.

The testimony of WMI's in-house hydro-geologist, Terry Johnson, is illustrative of this attitude. He admitted that monitoring wells which showed continuing exceedances such as 13D and 13S were simply decommissioned. (Cy. Hrg. Volume 26, Page 110). In the case of other exceedances, confirmation sampling was simply not performed or, if performed, not performed on a timely basis. (Cy. Hrg. Volume 26, Pages 96, 99). Mr. Johnson had the full litany of

excuses for exceedances from contaminated samples to laboratory errors to State standards being too stringent. Charles Norris' testimony that monitoring well history demonstrates a long time pattern of leachate releases into the groundwater from the existing facility is much more persuasive.

In responding to reported monitoring well exceedances, WMI has also employed the mathematical trick known as "intra-well comparison," whereby contaminant levels in one well are not compared to baseline levels in an up-gradient well but rather are compared to the previous monitoring history in that well. Norris demonstrated graphically in Karlock Exhibit #7.27 (C-840, 841) how the concept of intra-well comparison can be used to increase the AGQS (applicable groundwater quality standards) in a given well over a period of time, sometimes by as much as a factor of one hundred. (Cy. Hrg. Volume 23, Pages 94, 95).

**(6) WMI's proposed location is functionally the same as the one found unsafe in this Board's Decision in County of Kankakee vs City of Kankakee.**

This argument has already alluded to various elements in WMI's site investigation and characterization which received negative comments in this Board's decision in County of Kankakee vs. City of Kankakee, (PCB 03-31, January 9, 2003). WMI participated in the City of Kankakee hearings challenging Town & Country's hydro-geologic conclusions, and WMI also argued the unsuitability of the Town & Country site in its brief to this Board. Therefore, it is not surprising that Ms. Underwood in her testimony tried to differentiate her conclusions from those previously offered by Town & Country's witnesses. However, in doing so she also repudiated previous conclusions and interpretations consistently argued by her colleagues to the IEPA. Besides the repudiation of channelized flow already discussed, Ms. Underwood in her testimony

rejected the established conclusion from previous investigations of the existing WMI site that the uppermost aquifer included the weathered dolomite and basil sand above the dolomite. (Cy. Hrg. Volume 19, Page 127). Her testimony at the siting hearing was that there is no weathered material above the bedrock. (Cy. Hrg. Volume 22, Page 32). While she opined that the uppermost aquifer was perhaps two hundred feet thick, she had no plan to monitor the lower portion of that aquifer. She acknowledged WMI's previous permit applications to the IEPA in which the uppermost aquifer was defined as being ten feet thick, and the dolomite below that was identified as a confining unit, but added that this was done for modeling purposes only. Ms. Underwood acknowledged that the conclusions regarding the nature of the uppermost aquifer found in WMI's previous site investigations and permit applications to the IEPA had, in fact, been used by Town & Country to support their virtually identical conclusions about the hydrogeologic conditions at their closely adjacent site. (Cy. Hrg. Volume 22, Page 38).

No matter how Ms. Underwood wants to gloss over the fact, it is impossible to escape the conclusion that WMI's proposed site is hydro-geologically the same as the site rejected by this Board in County of Kankakee vs. City of Kankakee. While the Board, in its decision, in the County of Kankakee case does not mention the over engineered and enhanced designed features of the proposed Town & Country site such as the twelve foot thick side liners and the four and one-half foot recompacted structural fill underneath the bottom liner, the fact remains that the WMI design is a bare bones design not exceeding the State minimum in any component. This Board in County of Kankakee criticized Town & Country for attempting to characterize the bedrock based on only one deep boring, but is that really any different than Ms. Underwood's

admission that WMI had no borings which completely penetrated what she believed to be the aquifer? Accordingly, this Board must reject WMI's proofs regarding the safety and suitability of the proposed location and design as insufficient.

## VII. The Application For Siting Approval Is Not Consistent With The Kankakee County Solid Waste Management Plan.

Petitioner notes initially that while WMI presented testimonial evidence through Sheryl Smith that its Application was consistent with the County Solid Waste Management Plan, WMI declined to offer the Plan or its amendments into evidence, thereby making a meaningful analysis of Ms. Smith's testimony somewhat difficult. WMI's omission notwithstanding, the October 2001 and March 2002 Plan amendments are in the record as Exhibits 1 and 2 attached to Objector, Merlin Karlock's, Motion to Dismiss filed on the first day of the siting hearing. (C-701-706). The County Solid Waste Management Plan, itself, was offered by Objector, Michael Watson, as his Exhibit # 7 at the Board Hearing on May 6th.

The Kankakee County Solid Waste Management Plan states in pertinent part:

> "Groundwater Hydrology. The protection of the groundwater is one of the primary concerns in siting a landfill. A site should not be located above or near a groundwater recharge zone or a heavily utilized water supply aquifer." (Board Hearing, May 6, 2003 Watson Exhibit #7, Page 330)

The testimony of Charles Norris that the silurian dolomite aquifer is a heavily used drinking water aquifer is un-rebutted. (Cy. Hrg. Volume 24, Page 104; Volume 25, Page 67). No WMI witness offered testimony to the contrary, or for that matter, any testimony on this subject. The only possible factual finding, therefore, is that because the proposed site is located above a heavily used drinking water supply, it is not consistent with the County Solid Waste Management Plan.

The March 12, 2002 amendment to the Solid Waste Management Plan states in pertinent part:

> "The owner or operator of a proposed new landfill or landfill expansion in the County shall be required to establish a property value guarantee program for households within a site specific distance from the proposed landfill site, such property value guarantee program to be prepared by an independent entity satisfactory to the County." (C-705).

The only testimony on this subject came from Sheryl Smith who acknowledged that no independently prepared property value guarantee program existed. (Cy. Hrg. Volume 10, Pages 85, 86). Similarly, the March 12, 2002 Plan amendment called for the owner of a new or expanded landfill to post either an environmental contingency escrow fund or some other type of payment or performance bond or policy of environmental impairment insurance in a form and amount acceptable to the County. (C-705). Once again, Sheryl Smith, WMI's expert on Plan consistency, could not conclude that this requirement had been met. (Cy. Hrg. Volume 10, Pages 81, 82).

In addition, Petitioner Karlock adopts as his own the arguments set forth in the Brief of Petitioner, Keith Runyon. Based on the foregoing, it is unequivocally clear that WMI has failed to prove consistency with the County Solid Waste Management Plan. The County Board finding to the contrary is against the manifest weight of the evidence.

## VIII. Conclusion

For the foregoing reasons, Petitioner, Merlin Karlock, respectfully prays that the decision of the Kankakee County Board granting site location approval to WMI for a new regional

pollution control facility be reversed or, in the alternative, that the same be remanded for a new hearing consistent with the jurisdictional and fundamental requirements of the Environmental Protection Act.

Respectfully Submitted,
Merlin Karlock,

BY: _____
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