September 24, 2008

Office of the Clerk Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph St., Suite 11-500 Chicago, IL 60601





Re: Case # AS 08-10

Dear Members of the Board:

I write to you concerning Peoria Disposal Company's proposal to obtain a delisting of electric arc furnace dust wastes treated at their PDC No.1 Landfill and waste treatment facility near Peoria, Illinois. I am opposed to this delisting on numerous grounds, but for the purposes of this letter I will confine my arguments to issues of the location of the waste treatment facility that would (in the event that their request is granted) remain open indefinitely.

The Peoria County Board denied PDC's application to expand its hazardous waste landfill due to concerns regarding the landfill's proximity to densely populated areas of Peoria and its position above the aquifer from which Peoria and many other central Illinois communities draw drinking water. These concerns pertain as well to PDC's proposed activities should it obtain this delisting.

Truck traffic bringing loads of dusty hazardous material through our communities to PDC#1 would continue for longer and at an increased rate over what would be expected if the waste continued to be classified as hazardous and landfilled accordingly. Indeed, if PDC succeeds in their efforts to, in effect, self-delist so they can accept wastes from generators not listed in this application then such traffic could increase greatly on a daily basis and extend indefinitely into the future. In their Technical Support Documents PDC projects an anticipated 200-300 tons of EAF dust coming in to the facility on a daily basis, just from the generators listed in the proposal. It could be much more if they are allowed to accept wastes from new generators without approval, as they are proposing.

Increased traffic brings an increased risk of accidents and spills. This summer alone in Peoria County there have been two truck spills that have appeared prominently in local papers (and likely others that have not received such press coverage): a truckload of gravel overturned in downtown Chillicothe at the intersection of Route 29 and Truitt Ave.; and a tanker truck full of lye skidded onto its side on Route 24 near the interchange with I-474. Just last month a truck hauling waste to PDC's DeWitt County Landfill (a listed potential recipient of the proposed delisted EAF dust) overturned just outside the landfill's gates. So truck accidents and spills in the area are not just remote hypotheticals, but fairly regularly occurring events.

If the trucks were traveling to some remote location far from the city limits it would still be a concern; however, PDC No.1 sits directly on the edge of the city of Peoria. Peoria has at least 23 schools and five daycare/preschools within 3 miles of the landfill. OSF and Methodist hospitals are approximately three and a half miles and Proctor hospital is just over four miles from the landfill. 53,000 citizens live within three miles of the landfill, and largely east and downwind of it. A spill of dusty waste on a breezy day would send clouds of dust laden with lead, hexavalent chromium, and/or other heavy metals drifting over and into some of the most densely populated neighborhoods in Peoria—neighborhoods that are home to some of our most vulnerable citizens.

However, it should be noted that an actual spill is not necessary to send contaminated dust wafting into Peoria. Upon arriving at the treatment facility, the loads must be uncovered to have their contents verified; they must also be unloaded into the treatment facility and into the mixer. While PDC has equipment and procedures in place intended to prevent or minimize the escape of hazardous dust, how do we know such escapes don't take place?

Actually, we know they do. Freedom of Information Act requests filed in connection with PDC's failed expansion application revealed that PDC reported consistently high releases of dangerous PM-10 pollutants in the period 2002-2005, with the highest being a whopping 43 times the permitted level. A spill is a one-time, fairly visible event; how many of the 53,000 people living within 3 miles of that facility knew what was drifting through their neighborhoods and public parks and through the open windows of their homes, schools, and nursing homes—especially considering it took a FOIA request for us to discover it? Should this delisting be approved, these sorts of insults to the systems of thousands of of Peorians would be repeated indefinitely.

Not only must we have clean air to breathe, but we also need clean water to drink. While the delisted treated EAF dust waste is not proposed to be landfilled (by and large) at PDC #1, it will be treated there and held for testing and curing there. Activities related to the waste treatment facility should this delisting be approved will only make aquifer contamination by the already-landfilled hazardous waste more likely. In the Technical Support Document for their delisting proposal, PDC describes how the treated waste will be moved to a storage area in 25 cubic yard rolloff boxes or 168 cubic yard gondola-style railboxes to await testing, or (having failed initial testing) to cure for a period of time before retesting. These very large, very heavy containers will need to be moved by very large, very heavy equipment. The storage area PDC proposes to use is portions of landfill cells C-1, C-2, and C-3.

According to PDC's estimates, each rolloff box holds 37.5 tons of treated waste, and each gondola box holds 252 tons of treated waste. With an anticipated daily output of treated waste of 300-450 tons (again using PDC's own numbers), that's between 8 and 12 trips across the closed landfill cells hauling a 37.5-ton rolloff container every day. PDC plans to transfer the waste using articulated off-road trucks when gondolas are used for storage. These trucks range in size from about 25 to 40 tons, and hold about as much as they weigh. Therefore, there could be as many as 18 50-ton trips or 11 80-ton trips across the closed cells every day. I am very concerned about the repeated compaction and wear and tear to the landfill cells of driving these heavy machines and heavy loads back and forth over them on a daily basis. This does not even go into the loading-out for disposal using track-type excavators and tractor-dump trailers, all of which will be maneuvering over these closed landfill cells.

I am also concerned about the additional weight of the stored material on the closed cells. From the Technical Support Document it appears that PDC anticipates successfully treated waste being in storage on-site for a day before being loaded out for disposal at another landfill. However, it seems they anticipate fairly regularly having to keep batches of treated waste in storage for further curing before it is acceptable for landfilling—they obtained a modification of their operating permit from the IEPA to increase the amount of time treated waste may be stored prior to re-treatment from 15 to 60 days. There does not seem to be any overall storage time limit; in other words, it appears that if a batch requires retreatment, it can be held 60 days before being retreated, then held again for 60 days, etc. etc.

So at a bare minimum, there would be 1 day's output, or 8-12 rolloff boxes or 1-2 gondolas stored on the closed landfill cells every day, for an additional weight of 300-450 tons. However, there are quite likely to be more. A week's worth of treated waste waiting to cure and be retested would be 40-60 rolloff boxes or 5-10 gondolas, for a total of 1,500-2,250 tons. If every batch stays in storage for 45

days (the upper limit suggested in the Technical Support Document in the table on page 3-13) you could have 360-540 rolloff boxes or 45-90 gondolas and an additional weight over the cells of 13,500-20,250 tons. And of course if PDC is allowed to accept waste from new generators without approval those numbers would all go up.

This is all disturbing enough if we are sure the cells over which the waste is to be stored are all intact and in good repair. Again, we actually know the opposite is true. We know from our research during the expansion hearings that there is evidence that cell C-1 had significant leaking of leachate and that the liner system was compromised. During the landfill expansion hearing process, Peoria Families Against Toxic Waste brought forward evidence that PDC had encountered a sand lens when digging cell C-1, and that they were unable to find the bottom of it. Sand lenses can be a direct route into the aquifer below. Cell C-1 was built over two sand lenses encountered in construction of the cell. Repeated hauling of heavy loads back and forth across this already compromised area only increases the chances of a breach and the contamination of the source of 60% of Peoria's drinking water. A map showing the location of the sand lenses is enclosed with this letter.

Because it has been stated that this delisting proposal would be considered separately from PDC's earlier expansion application and related filings and arguments, I am enclosing with my letter an Evidentiary Summary prepared by Peoria Families Against Toxic Waste in response to that expansion application. I do so because many of the same concerns are relevant to this delisting proposal, in particular issues involving compatibility with the surrounding area, air pollution emissions, and potential contamination of the Sankoty Aquifer. This summary is well-researched and fully footnoted.

This delisting would pose a long-term threat to the health of local residents through both air and water pollution, all to gain profit for a few shareholders of Peoria Disposal Company and cost-reduction for companies largely outside of Peoria County (and even Illinois), some of whom are owned by companies outside of the United States. The tens of thousands of citizens of central Illinois who depend on clean air to breathe and clean drinking water from the Sankoty Aquifer deserve better than to be endangered for someone else's profit. We are depending on you to deny this delisting request.

Sincerely.

Lisa K. Offutt 10629 N Moss Street PO Box 222 Mossville, IL 61552-0222

encl: map of sand lenses beneath Cell C-1 Peoria Families Against Toxic Waste Evidentiary Summary



# PEORIA FAMILIES AGAINST TOXIC WASTE Evidentiary Summary

March 27, 2006

(excerpt from the)

## PEORIA COUNTY BOARD STRATEGIC PLAN:

"The Strategic Plan includes a vision statement and guiding principles to help maintain focus on long-term goals. The incorporated principles that guide our vision serve as a checks and balances system for all policies, decisions, plans and actions. If a policy does not meet the standards set forth by our guiding principles, then the policy does not reflect our vision for the future and shall not be implemented."

#### VISION STATEMENT:

"Our residents live in a safe environment and have an opportunity for healthy living"

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#### INTRODUCTION

Recently, Peoria Disposal Company (PDC) filed for an expansion of its hazardous waste landfill. This expansion would expand the current 32.4-acre facility by eight additional acres and allow a vertical expansion of an additional 45 feet. PDC's current landfill will reach capacity in about four years. Their recent application for expansion will extend the operation of the facility beyond that by an additional 15 years *or more.*<sup>1</sup>

Peoria Families Against Toxic Waste (PFATW) consists of a concerned group of Peoria County citizens who care about our community. We are ordinary people. We have different backgrounds, different political views and different income levels, but we are united on one point—to see that the PDC landfill local siting measure is not approved by the Peoria County Board.

We do not make our money in the hazardous waste business. Unlike PDC, which will make many millions of dollars if this measure passes, we will receive no financial gain *regardless of the outcome of this measure*.

#### This Document

Peoria Families Against Toxic Waste (PFATW) prepared this document to directly address the criteria that the county board must evaluate when deciding this issue.

We have addressed each criterion individually. Each criterion starts with a list of sourced facts and figures, followed by a summarization of those facts. Our conclusions are based on evidence submitted by PFATW, PDC, the original PDC application and hearing testimony.

We realize that technical terms like "TRI" and "Recharge Area" may be new to some people reading this document. We have included a glossary to help demystify the language.

A lot of this data overlap the nine criteria. Please do not feel the need to confine a fact to a particular criterion, as it may also apply to others. Our goal was to make the document readable and organize the information logically for you.

#### Our Concerns

Why are we against this measure? The document goes into detail on each point, but we summarize them here in order of greatest concern.

*Health (Criterion 2)*—Our primary concern speaks to the health issues related to the site. We share the concern of Peoria's medical community that the risk is too great. Submitted evidence shows that PDC's hazardous waste facility puts our citizens' health at risk. PDC is polluting our environment and this type of pollution *has* been shown to have a damaging effect on the human body. The risk is too great.

*Groundwater Protection (Criterion 9)*—The Sankoty Aquifer provides drinking water to 264,000 people. Part of this fragile water system lies directly beneath the PDC landfill. The poor choice of the landfill location puts a heavy burden on the barrier that separates our drinking water from the thousands of tons of toxins that PDC accepts annually. As you will see, experts disagree on how long this barrier will be able to protect our aquifer. No one disputes the fact that the liner will fail.

*Property Values (Criterion 3)*—PDC has claimed that property values will not be affected by its operations. Industry experts, history and common sense disagree. The fact that PDC has been processing hazardous materials at its site was largely unknown to most of our citizens. But that has changed in recent months. This new knowledge that an active hazardous waste facility operates within a few miles from the majority of homes in Peoria will have an impact on property values.

These are our main concerns, but we also present strong cases that speak to the other criteria.

We back up our views with industry experts including Dr. G. Fred Lee. Dr. Lee is a nationally recognized scientist and expert in hazardous waste evaluation and management. He has conducted contract and grant research and prepared affidavits/declarations for hundreds of companies, government entities and organizations in the United States and Canada. Dr. Lee talks directly to technical issues regarding this expansion proposal, and his analysis highlights weaknesses in PDC's plan.

#### Looking Forward

We respect the role of the county board in this decision-making process and trust that you will make your decision based on the best interests of the constituency that elected you.

We have a deep concern for the people and businesses in this community. The facts are clear. This expansion initiative will be bad for our county, not only in the short term, but for many, many generations to come. Long after this decision is made, long after PDC No. 1 has closed, long after the liners fail, the toxins that are being buried will still be present in our community.

#### You can change this.

Peoria County can have cleaner air, land, and water. This can be a healthier place to live. Industry can thrive here. Property in Peoria can be a desired commodity. We can hand our future generations a legacy they will be proud of. Please vote not only with your constituents in mind but also knowing that the future and well-being of your children, your grandchildren and ours is at stake.

#### **DECISION CRITERIA**

An applicant for local siting approval shall submit sufficient details describing the proposed facility to demonstrate compliance, and local siting approval shall be granted only if the proposed facility meets 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 to minimize the effect on the value of the surrounding property.
- (4) The facility is located outside the boundary of the 100-year floodplain, 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.
- (6) The traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows.
- (7) If the facility will be treating, storing or disposing of hazardous waste, an emergency response plan exists for the facility, which includes notification, containment and evacuation procedures to be used in case of an accidental release.
- (8) The facility is consistent with the county's solid waste management plan.
- (9) If the facility will be located within a regulated recharge area, any applicable requirements specified by the board for such areas have been met.

The county board or the governing body of the municipality may also consider as evidence the previous operating experience and past record of convictions or admissions of violations of the applicant (and any subsidiary or parent corporation) in the field of solid waste management when considering criteria (2) and (5) under this Section.

Local jurisdictions, like Peoria County, may impose *stricter* standards or require additional criteria to be met to achieve local siting approval, as long as the additional locally imposed criteria are not inconsistent with the Illinois Environmental Protection Act. One example of this is Peoria County's requirement that the Applicant provide detailed financial planning and technical information for the <u>perpetual care</u> of the site after closing. Peoria County Code Section 7.5-38(e). This is in effect the 10th criteria.

## **CRITERION 1:**

The facility is necessary to accommodate the waste needs of the area it is intended to serve.

#### What is the "area intended to serve" and how well is PDC meeting its needs?

- PDC's Vice President of Development and Operations, Ron Edwards stated in his testimony that the intended area was local. He says: "Why is hazardous waste here? Problem, local industry such as Caterpillar, Keystone, International Paper, International Harvester, Sherex, and others such as John Deere, had a problem, our waste is suddenly being regulated and we have nowhere to go, who will take care of it for us. We will have to close our operations or at best haul the waste for long distances. Solution, PDC again responded to its customers in the advancements of environmental protection in Peoria County."<sup>2</sup>
- In 2004, only 9.5 percent of all hazardous waste that PDC accepted came from Peoria County, with the trend in a clear downward direction. The majority of the remaining 90.5 percent are transported from other states.<sup>3</sup> This translates into approximately 107,300 tons of hazardous waste that is accepted each year by Peoria County, *from non-local companies*. The remaining fraction, 11,250 tons, is generated locally.



#### Percentage of Local and Non-Local Hazardous Waste Accepted at PDC No. 1

#### What about distance and cost?

- It is closer for Peoria generators to go to Indiana, Ohio or Michigan than it is for a significant number of PDC's current customers to come to Peoria County.<sup>4</sup>
- Since a substantial part of the hazardous wastes that PDC has been accepting and proposes to continue to accept is from non-local (non-Peoria County) sources, the Peoria County public is being exposed to hazardous chemicals that more appropriately should be managed in the vicinity of their sources.<sup>5</sup>
- A nearby hazardous waste facility in Indiana could readily accept our local waste for an additional transportation cost of \$30 per ton.<sup>6</sup>
- PDC has only recently offered the county a token sum of \$1 per ton as compensation<sup>7</sup>—far below typical industry rates.<sup>8</sup>

## PDC has competitors!

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- Hazardous waste facilities in Indiana and Ohio recently received expansion permits.<sup>9</sup> PDC receives waste from 27 Indiana generators.<sup>10</sup> PDC accepted waste from Ohio, another state with its own facility.<sup>11</sup> Ron Edwards testified that PDC could look to different business models toward the end of the 15 year expansion.<sup>12</sup> =

#### **CRITERION 1—SUMMARY**

Is PDC meeting the waste needs of the industries in our county?

It appears that our local companies will be negatively affected if this expansion measure passes. Here's why:

The lifespan of the current landfill is four years. The reason? PDC accepts a huge percentage of waste from non-local sources. If non-local waste is taken out of the equation, the landfill's lifespan reaches about 33 years -- *without the expansion approval*. PDC expects the landfill to reach capacity in 19 years *with* the expansion. This means local business will *lose* roughly another 14 years of use *if the measure passes*. This is bad for local industry.

Related to the previous point, PDC's self-serving "accommodation" or voluntary restriction number 7, to guarantee capacity of Peoria County waste for 15 years, is illusory. The expected life of the expanded facility is just that—15 years.

Add to this the fact that the numbers clearly show that the receipt of local hazardous waste is on a steady decline and the impact of the expansion may be even worse. It appears that local businesses are doing their part to keep our environment clean by reducing hazardous waste production, and PDC is responding by reaching out to new markets to increase the amount of hazardous material that it imports into our county. Each shipment increases PDC's profit at the expense of Peoria County.

A key point to remember is less than one tenth of all hazardous materials that PDC dumps in our county is from local companies.

PDC downplayed the fact that Indiana has an operating hazardous waste site, which charges less than PDC to accept waste. Their argument that local businesses would be charged \$30 per ton for transportation did not take into account the fact that the competition may have lower rates. This difference could drive the \$30 per ton figure much lower.

PDC was merely speculating on a cost increase to local generators if the expansion request is denied. No total cost or total volume picture or information was given by PDC at any time during the hearing or in its Application. For "proprietary" reasons, PDC intentionally kept any such information out of the application process. PDC did inject disposal costs into the application process - not about PDC's own cost and volume structure, but about that of others, especially Keystone Steel and Wire. Speculative and incomplete testimony was given about potentially increased transportation costs if the expansion request is refused. But there is no way to quantify or prove a *total* cost differential (including transportation costs) when no evidence on disposal fees or disposal volumes is in the record.

It's important to remember that the states PDC intends to serve can be served well by other hazardous waste landfills. And just like waste producing companies in the ten states in question, our local companies will survive without a hazardous landfill in their own county. PDC failed to establish in its Application or at the hearing that there is an urgent need to expand the PDC facility when other hazardous waste landfills exist in the Midwest.

PDC's retained consultant, Sheryl Smith, admitted that in the 24 times she has been retained by landfills in a siting application process, she had *always* found a need for the landfill to exist.<sup>13</sup> PDC, and Sheryl Smith, defined the intended service area to exclude Indiana, a state with a hazardous waste disposal facility. This is manipulative at best given the fact that PDC accepted significant quantities of hazardous waste, non-hazardous waste and special wastes from *Indiana* during the same 1999 to 2004 study period. Indiana generated waste included electric arc furnace dust from ISPAT Inland Steel and Nucor Steel, as well as 25 other Indiana generators. PDC also accepted waste from Ohio, another state with its own facility.

There was no testimony that Indiana, Michigan or Ohio facilities would be incapable of providing disposal service for Peoria County generators, or for that matter, any generator in the Applicant's defined intended service area. In Indiana and Ohio, the hazardous waste disposal facilities recently received expansion permits. There is no evidence that regional facilities and disposal alternatives other than PDC will cease to exist any time in the future. It is closer for Peoria generators to go to Indiana, Ohio or Michigan than it is for a significant number of PDC's current customers to come to Peoria County. Based on the existence of significant, recently expanded and nearby capacity on a regional basis, there is no *urgent* need to expand PDC's Peoria County facility.

PDC would still have a role in hazardous waste disposal even if the Application is denied. Ron Edwards testified that upon reaching capacity at the landfill, PDC would transition into "other ways of helping customers manage their wastes...." PDC's expertise and brokerage capabilities would enable them to still have a significant role in servicing the hazardous waste disposal needs of Peoria County generators.

Peoria County has done its share. Enough is enough.

## **CRITERION 2:**

The facility is so designed, located and proposed to be operated that the public health, safety and welfare will be protected.

## Peoria County is actively being polluted.

- Peoria has some of the worst pollution scores in the state and nation:
  - National: Peoria County is the third worst county in the United States for cadmium.<sup>14</sup>
  - National: Peoria County is the 16<sup>th</sup> worst county in the United States for Toxic Release Inventory (TRI) chemical releases.<sup>15</sup>
  - National: Peoria County ranks 24th in the nation for lead TR1.<sup>16</sup>
  - State: Peoria County is the No. 1 worst county in Illinois for TRI chemical releases.<sup>17</sup>
  - State: Peoria County is the fifth worst county in Illinois for TRI air releases.<sup>18</sup>

## This pollution affects our citizens' health.

- The American Cancer Society indicates that Peoria County is "significantly higher than state average" in cancer incidences.<sup>19</sup>
- From 1998 to 2002 there has been a 1073 percent increase in total cancer risk scores.<sup>20</sup>
- Studies have shown a significant increase in the incidence of birth defects with proximity to a hazardous waste landfill. Sandra Steingraber, Ph.D. is an internationally recognized expert on the environmental links to cancer and threats to reproductive health. She states: "As the distance between waste site and place of residence increases, the chances of birth defects consistently decreases."<sup>21</sup>
- Dr. Lee's report mentions: "An issue of concern is whether those who live near landfills show evidence of adverse health effects. It is known from a number of studies conducted by the Centers for Disease Control and Prevention (Anderson, pers. comm., 1999) that some populations living near landfills have shown a greater incidence of some diseases."<sup>22</sup>
- 15 percent of Peoria's children have been diagnosed with lead poisoning-the highest in the nation.<sup>23</sup>
- A recent PJ Star article about lead poisoning in Peoria stated: "It's likely in your bloodstream. It's probably in your child's."<sup>24</sup>

Illinois Incidence Rates by County, 1996 – 2000



There is no safe threshold for lead levels in blood.<sup>25</sup>
 OSHA has recently lowered its Permissible Exposure Limits for workers to hexavalent chromium by a factor of 100.<sup>26</sup>

## According to recent EPA data, PDC is actively polluting the county.

- PDC brings toxins into our county.
  - PDC accepted 118,561 tons of hazardous waste in 2004.<sup>27</sup>
  - Here is a small sample list of these heavy metals and their pounds in benzene-equivalents accepted by PDC in 2002:<sup>28</sup>
    - o Cadmium Compounds—130,000 pounds
    - o Chromium Compounds—33,000 pounds
    - o Lead Compounds—2800 pounds
- PDC's pollution scores
  - PDC is No. 1 in Peoria County for TRI chemical releases.<sup>29</sup>
  - PDC is No. 1 in Illinois for TRI chemical releases.<sup>30</sup>
  - PDC is the 19<sup>th</sup> top facility for TRI chemical releases in the United States.
  - Air Pollution: In 2003 alone, PDC released 1,533 pounds of heavy metals *into the county's air*. In addition to *88 pounds of lead*, they also released chromium, copper, manganese and zinc compounds<sup>31</sup>
  - Toxins entering Peoria County via PDC are increasing.<sup>32</sup>



PDC is the No. 1 polluter in Peoria County, according to the recent 2002 EPA TRI data.<sup>33</sup>



#### 2002 TRI Total Release Breakdown for Peoria County

#### Concerns about the PDC hazardous waste site

In 4 of the 5 years from 2000 to 2004, PDC reported dangerous emissions of PM-10 pollutants into our air which exceeded the annual allowable emissions established by permit for the waste processing facility by the Illinois EPA.<sup>34</sup> Indeed, PDC's PM-10 emissions have been consistently high for the last five consecutive years reported, with 2004 being the highest.<sup>35</sup> This trend is especially concerning given the known risks associated with PM-10.

## PM10 Air Pollution Emissions for PDC #1



- The PDC proposed landfill expansion includes the continued acceptance of a wide variety of hazardous waste types that are a potential threat to public health, groundwater resources and the environment.<sup>36</sup>
- In addition to known, regulated chemicals, hazardous wastes of the type that PDC has been accepting and proposes to continue to accept contain a wide variety of unregulated, unmonitored hazardous and deleterious chemicals that are a threat to groundwater quality and nearby air quality.<sup>37</sup>
- PDC has failed to inform Peoria County and the public about the long-term (effectively, forever) threat that the hazardous wastes represent to domestic water supplies that can be affected by landfill releases of leachate (soluble components of the deposited hazardous wastes).<sup>38</sup>
- The PDC landfill represents a near-term and long-term threat to public health, groundwater resources and the environment associated with releases of hazardous and deleterious chemicals from the landfill.<sup>39</sup>
- HDPE liners will deteriorate and leak.<sup>40</sup>
- The PDC landfill rests on top of an interconnected and interwoven finger of the Sankoty aquifer system.<sup>41</sup>
- Experts on both sides agree that low levels of contaminants from PDC No. 1 have already
  penetrated into the aquifer system below it.<sup>42</sup>
- Contamination from the PDC landfill can potentially affect the health of the people who use the Sankoty as their drinking water source.<sup>43</sup>
- The materials that PDC accepts in the future may present even more health issues for our community. There is no governing or regulatory body outside of PDC that can block the acceptance of other types of hazardous materials in the future.<sup>44 45</sup>
- Dr. Lee calls attention to the subset of pollutants for which PDC tests versus the number of hazardous substances potentially present in leachate and air emissions.<sup>46</sup>
- Future legislation may relax regulations on pollution controls. Senator Jim Jeffords, ranking member of the Senate Environment and Public Works Committee commented in The New York Times: "Now President Bush and the Environmental Protection Agency want to weaken the largely successful Toxics Release Inventory program, which requires companies to tell the public how they dispose of or release nearly 650 chemicals that may harm human health and the environment."<sup>47</sup>
- PDC actively submits proposals to and accepts waste from Superfund sites outside our county.<sup>48 49</sup>

## Where does the health community stand on the issue?

- The medical committees of all three Peoria hospitals representing approximately 750 doctors, citing health risks and the proximity to a large population center, have spoken out against PDC landfill expansion.<sup>50</sup>
- Peoria Medical Society of the American Medical Association has passed a resolution calling for the prevention of hazardous waste landfills being placed over aquifers. This resolution is being considered at the Illinois State Medical Society and the American Medical Association.<sup>51</sup>
- PDC failed to provide any *medical* testimony or evidence to support its claim that the landfill expansion will not adversely affect the population's health.<sup>52</sup>

#### **CRITERION 2—SUMMARY**

#### Welcome to Peoria!

The bottled water business is booming. Children undergo routine, mandatory lead testing. We rank among the highest in the state for cancer. We are consistently in the highest group for air, water and land pollution. We lead the nation in lead poisoning. And the trends show that the situation is getting worse, not better.

Truth be told, Peoria County is polluted.

PDC is part of the problem, not the solution. The fact that a major hazardous waste facility is located adjacent to a major population center and over an aquifer system seems more like a work of bizarre fiction. *But it is our reality.* 

PDC routinely trucks toxins into our community, buries them in our soil and in the process pollutes our air with heavy metals. All of this occurs on top of our water supply system, which is protected by a barrier that will degrade in time.

PDC paints a picture of local industry, working within the EPA regulations, filtering out toxins before the material is released into the environment. This filtered material is shipped to PDC for safe disposal. Indeed, it is a fine picture.

#### But something's not working here.

Our residents are ailing from health conditions like cancer and lead poisoning at significantly higher rates than other areas. *It appears that the EPA regulations are failing in Peoria County.* Remember, this criterion talks to the public health, not adherence to the EPA regulations. Because of our county's pollution rankings and health crisis, our county board needs to hold Peoria to a higher standard than the EPA regulations. And it should.

The medical community, whose job it is to treat the health of the public, has spoken out loudly against this expansion measure. They are directly affected by anything that adversely affects our citizens' health. For the millions of dollars that PDC has profited, how many cases or lead poisoning, cancer, leukemia, etc., have we endured? Zero? One? Ten? One hundred? One thousand? More? We may never know.

The future may be even more concerning.

PDC currently limits its business to certain toxins. This can all change, without any oversight outside of PDC. Although it currently doesn't, the landfill *can* accept materials such as PCBs and dioxins. These items would add a whole new set of health risks to a community already struggling. The only thing that would prevent PDC from bringing these toxins into Peoria County is a committee made up of, and paid by, PDC. There are *no* provisions for an independent committee to review such matters in the future. There is no check and balance for the citizens of Peoria County.

Since a major part of the health issue concerns the possibility of groundwater contamination, we encourage you to review our concerns on the ninth criteria. That section describes the fragility and importance of the Sankoty aquifer and calls out problems with how PDC has handled the challenge of keeping our water supply uncontaminated.

*The Peoria County Board must make the decision.* Decisions about the protection of *the public health, safety and welfare of our community* are solely within the province of our elected representatives on the Peoria County Board.

It is the same water we drink. Complete protection of public water supplies and the groundwater that feeds them demands a heightened sensitivity and thoroughly critical review of the pending Application. The Peoria County Board is entitled under the law to deny the Application if the Board determines that the *proximity* of the landfill expansion to the interconnected Sankoty/Shelbyville aquifer *creates a present or future public health concern*, even if all technical requirements of the application process are otherwise met.

In its Application, PDC itself agrees that "protection of the groundwater quality is one, if not the most important factor in the siting, design and permitting of any landfill. This is particularly true for hazardous waste landfills such as the PDC No. 1 Landfill."<sup>53</sup> PDC continues by explaining why it is the most important factor: "The primary risk to groundwater comes from landfill leachate. Leachate is water (primarily from precipitation infiltration) that seeps through the landfill wastes. As it seeps through the wastes, various leachable constituents of the waste dissolve into the leachate. If significant quantities of leachate were allowed to infiltrate to groundwater, such as has happened at some poorly located unlined landfills, groundwater quality can be impaired."<sup>54</sup>

PDC framed the issue very well, essentially: *Given the proximity of the landfill to the Sankoty/Shelbyville aquifer, is the design of the landfill in question foolproof in every way to protect the public health from present or future groundwater and water supply contamination?* The answer is *NO*!

PDC is not required to report air emissions data from their separately permitted hazardous waste processing facility as part of their Application. If they had, the Peoria County Board would surely be alarmed by the data. Thanks only to requests by citizens who exercised the Freedom of Information Act, the County may now consider that PDC reported dangerous PM-10 pollutants in our air, for example in 2002, of 35 times the permitted level established by the Illinois EPA.<sup>55</sup> Likewise, for 2004, it was 43 times the permitted level.<sup>56</sup> Indeed, PDC's recent annual PM-10 emissions have been consistently high, with its highest numbers reported in 2004.<sup>57</sup> This trend is especially concerning given the known risks associated with PM-10.

"PM" stands for particulate matter, which is a complex mixture of extremely small particles and liquid droplets. "10" stands for micrometers.<sup>58</sup> PM-10 particles are of concern to the EPA because, given their tiny size, they can be inhaled and reach deep into our lungs, and some can even get into our bloodstream. Numerous scientific studies have linked particle pollution to a variety of problems including increased respiratory problems, decreased lung function, aggravated asthma, chronic bronchitis, irregular heartbeat, non-fatal heart attacks, and premature death in people with heart or lung disease.<sup>59</sup>

PDC did not disclose this information during the hearing process or, to the best of our knowledge, in the Application. The Peoria County Board should consider this to be a very serious concern. We hope IEPA is working diligently to correct this serious health concern in order to protect Peoria County citizens for the remaining life of the existing landfill. The County Board now has an opportunity, and responsibility, to eliminate this known health and safety threat going forward by denying the PDC expansion. Without the expansion of the hazardous landfill facility, the processing plant emitting the PM-10 would have nothing to do.

One of the greatest threats to the public's health is the PDC No. 1 barrel trench area. It's a much older part of the site where waste was buried in steel drums. The drums were not designed for long term storage and there is only a ten foot clay liner that serves as a barrier. In his report, Dr. Lee provides a roadmap to address the issues concerning the barrel trench area.

Little testimony was given by PDC about the pre-placement treatment (if any) of manufactured gas plant (MGP) remediation waste disposed in and comprising a significant quantity of landfill capacity. The dust created by the disposal process itself plus the wind will result in easy movement of this most toxic of substances to neighboring residential properties, thus risking their health and safety.

PDC attempted to discount the TRI numbers. That the Toxic Release Inventory (TRI) includes materials deposited in the PDC hazardous waste landfill is beside the point. To the public, college students, and those looking to move families or businesses to Peoria County, looking at the TRI numbers is shocking - so shocking as to dissuade anyone who looked at them from locating here. In addition, the TRI is a good benchmark of how many toxic chemicals are being stored in the landfill in Peoria County, in perpetuity, just waiting for the "foolproof" design to deteriorate over time.

As stated earlier, the Peoria County Board is entitled under the law to deny the Application if the Board determines that the *proximity* of the landfill expansion to the interconnected Sankoty/Shelbyville aquifer creates a present or future public health concern, even if all technical requirements of the application process are otherwise met.

On this criterion, the Peoria County board is free to weigh the science with public policy. In effect, it defines what steps can be taken to protect the health, safety and welfare of the people they are elected to serve. As board members, you can decide "how safe is safe?" The long list of constituents who oppose this measure are counting on you to consider their safety when making this decision. Voting against this measure is a strong vote of support for our community's health and well-being. Not only for today, but for many generations to come.

## **CRITERION 3:**

The facility is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect of the value of surrounding property.

The following photos demonstrate that there has been little or no regard to remain compatible with the surrounding residential area. Worse yet, PDC plans to add an additional 45 feet (4.5 stories) to these mounds.



## PDC No. 1 affects neighboring properties.

- PDC has failed to properly evaluate the airborne releases from the existing landfill, as well as those that could occur from the landfill expansion, which are a threat to public health and the environment in the vicinity of the landfill.<sup>60</sup>
- PDC has failed, in developing this landfill, to provide adequate PDC-owned buffer lands between where hazardous wastes have been and are proposed to continue to be deposited, and adjacent properties.<sup>61</sup>
- The inadequate buffer lands lead to a situation where airborne releases of regulated and currently unregulated hazardous chemicals, through off-gases and volatilization, have limited opportunity for dispersion on PDC property before trespass onto adjacent properties.<sup>62</sup>

## Property values will decrease.

- PDC's claim that property values will not decrease is fundamentally flawed. There was no
  evidence that the buyers or sellers were notified of the existence of the hazardous waste
  facility.<sup>63</sup>
- In a recent legal case, a property owner was awarded damages because a *health stigma* drove down property values.<sup>64</sup>
- PDC implied that there is already a stigma associated with their landfill when they stated that their facility has been compared to "Love Canal," and then PDC had to educate the county board as to the differences.<sup>65</sup>

## PDC's consultant on property values, Gary DeClark, testified about property values, but...

- Gary DeClark did not even attempt to analyze the 52% of the land to the west of the site that
  was predominately agricultural or vacant. The report did not cover the entire "surrounding
  property," it only covered half of it, and left out a significant piece of the puzzle.<sup>66</sup> PDC has
  not satisfied the valuation impact criteria.
- Gary DeClark has studied valuation and impact issues relating to landfill siting on four (4) prior occasions, and on all 4, found no affect on value from the location a landfill. The effect of the landfill on valuation was not just "minimized," it did not exist.<sup>67</sup>
- Again, Gary DeClark failed to conduct his "impact study" on the roughly one-half of the land predominately to the west of the site and consisting of vacant or agricultural land. He initially claimed he did not do such a study because of "insufficient data" of sales, etc.<sup>68</sup>
- Truth be told, however, is that Gary DeClark later admitted that he never even investigated the agricultural land on the west half of the site, never even considered doing a study on it.<sup>69</sup> A study was not done because of insufficient data, but rather because PDC and Gary DeClark only wanted to give us half the picture.
- Without doing a study, without doing any investigation whatsoever, Gary DeClark still gave his opinion that there would be no impact on property values to the west side of the site. This opinion was based on his 4 previous landfill studies, none of which concerned hazardous waste facilities.<sup>70</sup>
- After having given his opinion that there is no impact on property values, residential to the east and agricultural to the west, Gary DeClark then declared that every real estate salesperson had a duty to disclose the existence of the landfill to their clients and customers.<sup>71</sup> How can Gary DeClark declare that real estate salespeople have a duty to disclose the existence of the hazardous landfill to potential buyers, and then still declare that that disclosure will have no impact on valuation? It defies reality and common sense.

## Testimony and report by PDC's Consultant, Chris Lannert, was not credible:

- The written conclusions of the Lannert Group (authored by Gregory B. Stevens, and not the testifying witness, Chris Lannert) failed to find any incompatibility of any kind whatsoever between the hazardous waste disposal facility and the residential areas directly abutting roughly 42 % of the site, most of it being located in the City of Peoria.<sup>72</sup> No incompatibility was found by Mr. Lannert even though some residences are a mere 200 feet away from the PDC site.<sup>73</sup>
- It also concluded that no visual detriment to the landscape will be created by adding 45 feet in elevation to the site, and therefore, there is no incompatibility.<sup>74</sup>

- Lannert Group failed to analyze the size of population living within close proximity (within 1500 feet) of landfill, but acknowledged a large number of homes and apartment buildings, including some ongoing new construction.<sup>75</sup>
- Lannert Group had never seen an operating *hazardous* landfill this close to a major residential population center, with the closest they had ever seen being in Joliet and "a mile or so" away from the nearest residential units; yet again, PDC's landfill was found to be compatible with its surroundings.<sup>76</sup>
- No setback restrictions or locational requirements were even contemplated by Lannert Group where they did not find anything "incompatible" in the first place. Nonetheless, he later testified that if the landfill got too high or too close, "there could be some negative aspects, you know, of that type of landfill design."<sup>77</sup>
- Vertical expansion computer landform models were purposely manipulated so as to distort and minimize the truly massive impact another 45 feet vertical expansion is going to have on adjacent residential properties. In point of fact, Proposed View 3 was taken from a *third-story balcony* in a distant apartment (800 feet back) to lessen the modeled impact<sup>78</sup>, a greater distance away than any other computer modeled photo created by Lannert Group. Mr. Lannert stated that the initial picture forming the basis for the modeled image was taken on a public access cul-de-sac at ground level, and implied that the computer use of aerial photos made it look like the picture had been taken from a higher vantage point.<sup>79</sup> Mr. Lannert even acknowledged the impact of his manipulation when he answered another question by stating that when one is closer to a viewpoint, "it tends to mask what reality is."<sup>80</sup> The "reality" is that Lannert Group set out to minimize the impact of the photos taken by Peoria Families Against Toxic Waste.
- Mr. Lannert testified that "a picture is worth a thousand words."<sup>81</sup> The 3-D photo image that Lannert Group manipulated was the one with a similar perspective to the Peoria Families Against Toxic Waste photos included at the beginning of this section. Lannert Group's action speaks louder than even those thousand words.
- Mr. Lannert did acknowledge that the Peoria Families Against Toxic Waste photos at issue represented "realistic pictures in terms of relationship."<sup>82</sup>
- Mr. Lannert, a member of the American Planning Association (APA), was unfamiliar with the APA's Policy Guide on Solid and Hazardous Waste Management dated April 15, 2002, and in particular with Policy 6 which recommended that environmental protection and environmental justice should be ensured in every landfill siting determination. He agreed with the policy, just not as it applied to the PDC case.<sup>83</sup>
- In essence, Mr. Lannert's testimony on compatibility was: Since the landfill is already there, the surrounding uses must be compatible. On this point he is wrong: The Application is treated as if it is a new pollution control facility, and compatibility standards must be applied as strictly to an expanded facility as to one not yet in existence. He, and the Lannert Group, did neither, and therefore their report is insufficient to meet Criterion 3.

## Authorities weigh in on the topic of property values...

- "Everyone is concerned about property values. Very few people would buy a house near an airport
  or highway but we are less diligent when it comes to investigating hazardous waste sites near our
  home. In the case of hazardous waste sites, the best form of prevention is to avoid them. Finding
  the location of current or potential hazardous waste sites is critical before you purchase a home.
  Sometimes they may be closer than you think. Proximity to such sites should be considered
  especially if you acquire your drinking water from a well."<sup>84</sup>
  —The Center for Environmental Health, Home Safety
- "No one wants to buy-or list-a house near an environmental hazard." and "Homebuyers have a million details to manage, from financing their new homes to checking out the quality of nearby schools. They shouldn't have to worry about the air they breathe or the water they drink. Real estate professionals can recommend Scorecard.org to help buyers evaluate an area's environmental safety. The site allows users to identify local environmental hazards and gauge area pollution levels. You might also want to check it out before you list a toxic home that could hurt your reputation and possibly expose you to liability."<sup>85</sup> —RealtorMag

- "The results of the study of residential housing prices of homes located in the proximity to a large toxic chemical waste landfill in Toledo, Ohio, area from 1986 to 1990 strongly suggests a distinct negative impact on sale prices for homes located within 2.6 miles of the existing site and a diminishing impact before a distance of 5.75 miles is reached."<sup>86</sup>
   —Department of Finance at the University of Toledo, Ohio
- "It is now so clear that hazardous waste condition should result in lower real property tax assessments that an appellate court has held that an upstate town had a cause of action against a polluter for an alleged reduction in tax revenue for neighboring properties whose assessments were reduced because of its alleged pollution."<sup>87</sup>

-Hazardous Waste Conditions and Real Estate Taxes Revisited, William Siegel

#### **CRITERION 3—SUMMARY**

PDC expects people to believe that their business of disposal of hazardous waste and the proximity of their site to surrounding homes will not have any effect on property values. *It goes against logic to assert that people would choose to live next to an environmental hazard.* Even if it were just a perceived threat, most people would still choose not to live near it.

*PDC's secret is out.* Now that the community is becoming aware of the issue, expect to see declines in property values and county tax revenues.

Until this application was submitted a few months ago, most Peoria County residents were not aware that a hazardous waste dump was in our midst. This hazardous waste site has been largely unknown. It is certainly not a business that our community has publicized when attempting to attract talent and families to the area. Many of the citizens of Peoria County were not aware of the activities that were being performed behind the PDC No. 1 security gate. They know now. Now that it is public knowledge, realtors will be forced to disclose the fact that an active hazardous waste dump is operating within miles of the proposed house sale. Property values will decline.

The publicity of the dump has caused a recent increase in requests to the Assessor's Office by Peoria-area home owners to decrease their property taxes given their proximity to a hazardous landfill. This will have a negative effect on property values overall.

PDC also expects us to believe that they have taken care to minimize the impact to the surrounding areas. The photographs speak for themselves.

## **CRITERION 4:**

The facility is located outside the boundary of the 100-year flood plain or the site is flood-proofed.

The "glacial terrace" upon which the landfill is located, although not in a flood plain, is essentially surrounded by floodplains or ravines/low areas. There is no room for error—if waste is released off of site laterally (leachate runoff from the sides as opposed to down through the till) it will immediately get into the floodplain and the recharge area. Kickapoo Creek is a significant recharge source, as are the 3 forks of the unnamed creek to the east and south of the site.

## **CRITERION 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.

- Dr. Lee has specific comments that talk to the hazards of the PDC No. 1 site. We list some of his issues below, but we refer you to his report and papers for a more complete and in-depth technical analysis of the matter.
  - The buffer area between the landfill operations and adjacent properties is inadequate for safety. Dr. Lee discusses the hazards of living near a hazardous waste landfill.<sup>88</sup>
  - Airborne releases will have little opportunity to dilute before drifting into nearby neighborhoods and schoolyards.<sup>89</sup>
  - Dr. Lee addresses the inadequacy of PDC's airborne emissions monitoring, particularly the number of potentially harmful substances that are tested for.<sup>90</sup>
  - Seventy wells are within 1.5 miles of the site; 11 are within a mere 1,500 feet. Dr. Lee details eventual problems in this regard, including inadequate monitoring and the lack of a plan for replacing contaminated water sources for the surrounding area.<sup>91</sup>
- There have been at least four documented spills at PDC No. 1 since 1994.<sup>92</sup>

## **CRITERION 5-SUMMARY**

Spills prove accidents happen, and any accident puts our citizens' health at risk. There have been at least four documented spills from the PDC site since 1994. The topic of undocumented spills was not addressed in the hearing, but questions remain.

Any spill of toxic material is serious. PDC has a history of them.

Dr. Lee's paper addresses some of the hazards that exist with the PDC landfill and how those issues impact the people and resources surrounding it.

One thing is sure. Once the landfill is closed, the possibility of such occurrences diminishes significantly.

## **CRITERION 6:**

*The traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows.* 

## PDC has discussed increasing their area traffic, including rail.

- "The hazardous waste industry is shrinking, so we will have to expand beyond our territory of the Midwest if we want to maintain and/or expand our disposal volume at our Peoria hazardous waste landfill. This entails the use of rail, which gives us access into those other markets."<sup>93</sup>
   —Chris Coulter
- "Thinking outside of the box on issues, such as rail transportation of garbage from across the United States to our facilities and operating the transfer stations we already have in place, will help us to grow."<sup>94</sup> —Matt Coulter

## More traffic means more transportation pollution and hazards.

- 90.5 percent of all hazardous material disposed of at PDC No. 1 comes from outside our county. This represents a significant increase in traffic as well as transportation related emissions and pollution that would exist because such a high percentage of PDC's business is non-local.
- Ron Edwards himself acknowledged the issue of transportation pollution in his testimony.<sup>95</sup>
  - Question: "So it's not practical to have a local generator bring the waste that is normally done where the only thing that has changed is instead of it being put in Trench C-5, it would be packed up and shipped to Indiana or to another then licensed facility?"
  - Answer of Ron Edwards: "Right, that certainly wouldn't be economically practical. But, you know, also just the transportation of that creates many more emissions as well. I mean, you know, if we're looking out for the environment, there's a couple of reasons there, but certainly the economic impact would be the most substantial for generators."

#### **CRITERION 6—SUMMARY**

Because PDC accepts hazardous waste from non-local industry, its traffic on our county roads is approximately 10 times higher than if it were just local. *Approximately nine out of 10 shipments PDC accepts would not even be on the road.* This significant amount of non-local traffic greatly increases the chance of accidents and spills.

Keep in mind that the entire expansion proposal is based on a business-as-usual scenario. PDC may elect to double or triple its shipments without oversight. In addition, this application does not address potential traffic impact in the event that PDC changes management or chooses to utilize rail transport.

PDC's voluntary condition number 2, to agree not to construct a rail spur, may be beyond the County of Peoria's ability to enforce. One just has to look at the Kellar Branch abandonment application being subject to other regulatory authorities to see why.

## **CRITERION 7:**

*If the facility will be treating, storing or disposing of hazardous waste, an emergency response plan exists for the facility, which includes notification, containment and evacuation procedures to be used in case of an accidental release.* 

#### What about a fire?

- PDC acknowledges that there exists the possibility of a waste fire at its site.<sup>96</sup>
- In the case of fire, the Limestone Volunteer fire department will be the only fire department to respond.<sup>97</sup>
- Ron Edwards stated that he did not know what hazardous material training the responding fire department has had.<sup>98</sup>
- The PDC application makes no mention of PDC employees being trained as firefighters.<sup>99</sup>

Part of PDC's property extends into the city of Peoria (referred to as setback or buffer area). The PDC Application does not include coordination with City of Peoria emergency services.<sup>100</sup>

#### CRITERION 7—SUMMARY

Besides the hazardous waste that PDC No. 1 has on its premises, there also exists heavy machinery, buildings and other structures to support the handling of this material. These items are susceptible to fire. In the event of fire, the responding volunteer fire department may not be trained on how to deal with the special circumstances that exist at PDC No. 1. Nor are PDC personnel trained on the complexities of firefighting. This gap will have to be filled at the time of an actual emergency when seconds may affect lives.

In addition, part of the PDC No. 1 landfill property extends into the city of Peoria. Despite this, there was no testimony regarding coordination with the City of Peoria in the event of an emergency.

Furthermore, PFATW has contacted several local government entities in an attempt to understand our community's readiness in the event of a toxin release at PDC No. 1. The majority of them did not have a plan in place to deal with such an emergency.

Remember, in the case of a disaster, natural or otherwise, if the groundwater is contaminated, evacuation may not be limited to a few days. A contaminated water supply may have a devastating and long term impact on the county.

## **CRITERION 8:**

#### The facility is consistent with the County solid waste management plan.

The current Peoria County Solid Waste Management Plan is silent on hazardous waste landfills. Prior versions did seek to reduce generation and to facilitate recycling of hazardous waste in the county, but were dropped due to funding.<sup>101</sup>

#### Dr. Lee points out issues regarding the long term care of the site

- PDC only proposes to provide postclosure care (monitoring and maintenance) of the landfill for the minimum 30-year period. This approach does not conform to Peoria County's requirement of "perpetual care."
- PDC has established a postclosure funding approach in the form of a Trust Fund, which will provide for minimal postclosure monitoring and maintenance during a 30-year postclosure care period.
- Apparently, PDC's approach to postclosure funding will require that Peoria County provide
  postclosure funding beyond this minimum 30-year postclosure care period, for the effectively
  infinite period of time that the wastes in the landfill will be a threat. The required postclosure
  funding will represent a significant financial burden and liability to the County.

#### Other financial concerns

- Local businesses that *do not* use PDC hazardous landfill *are* being harmed through difficulty in recruiting talent to the area.<sup>102 103</sup>
- Up to this point, Peoria County has received little or no compensation for the acceptance of these toxins.<sup>104</sup>
- According to the assessor, PDC paid \$23,065 for Landfill #1 in 2004 taxes.<sup>105</sup>
- The *Peoria Journal Star* states: "It expects to take in 150,000 tons yearly during the 15 additional years if the expansion is approved, a total of \$180 million in revenues at an average rate of \$80 per ton."<sup>106</sup>

#### **CRITERION 8—SUMMARY**

Peoria looks out for its own. The county's solid-waste plan attempts to balance the needs of the community with the handling of our garbage. The financial consideration of this plan is one that seeks to ensure the fiscal health of our county and local industries.

Let's look at the dollars and cents of this long term.

PDC will stop care after 30 years (assuming release of site by IEPA at that time). For the first 30 years of post-closure care, PDC will be responsible and the trust fund will grow (and will not be tapped by PDC), according to PDC's estimated investment returns. PDC valued the trust fund at \$2,606,964 at the 31st year after closure (which is the first year of post-closure release by IEPA). They then ran the numbers for 100 years, and assumed that only normal, annual care costs would be incurred. So PDC's numbers run for at least 130 years from closure.

From the time the facility is released by IEPA, the county will be responsible- PDC sets up a trust fund, and then the county takes it from there.

Weaknesses abound, but one is that there is no guarantee that the whole trust fund won't be blown in the 35th year, or the 50th year, or worse yet, upon a default by PDC while it is still in the initial 30 year post-closure pre-release period.

Does Peoria County need to take this gamble?

The business case for local industry is weak. Manufacturers do not need a hazardous facility in their county to operate profitably. If they did, there would be hazardous waste sites in most every county. The fact that only 12 similar hazardous waste landfills exist in the United States shows that industry can thrive while having one not only outside its county, but outside its state.

PDC has put the interests of Peoria County second to its profit margin. Rather than reimburse Peoria for the negative effect that it has on the community, it chose to offer no compensation for its unpopular activities until it requested this expansion. If Peoria County accepts hazardous material by the ton, and therefore the risk, why does it receive little or even negative benefit?

## **CRITERION 9:**

That if the facility will be located within a regulated recharge area, any applicable requirements specified by the Board for such areas have been met.

#### Sankoty Aquifer

- The Sankoty aquifer underlies an area of more than 750 square miles.<sup>107</sup>
- A large supply of groundwater occurs in a buried aquifer lying in the bedrock valley of the ancestral Mississippi River. This deposit, known as the Sankoty sand, supplies many irrigation wells.<sup>108</sup>
- The Sankoty aquifer is contiguous with--and mixes water with--the Mahomet aquifer, which stretches across east central Illinois to Champaign-Urbana.<sup>109</sup>
- There is only one regulated recharge area in the State of Illinois, the Pleasant Valley Public Water District Regulated Recharge Area.<sup>110</sup> It happens to be only a mile or so away from the PDC hazardous waste facility, which is just outside the "regulated" recharge area.
- In the tri-county area alone, the Sankoty furnishes drinking water to 264,000 people in 39 communities.<sup>111</sup>
- Hydrologist Stephen Burch states in his report that sand and gravel aquifers like the Sankoty are "highly susceptible to contamination."<sup>112</sup>
- The base of the existing and proposed expansion of the PDC landfill is hydraulically connected to the Sankoty aquifer system.<sup>113</sup>

## Toxins sit over our water supply.



## Glacial Aquifers (source: National Atlas of the United States)

- The PDC landfill rests on top of an interconnected and interwoven finger of the Sankoty aquifer system.<sup>114</sup>
- Current IEPA regulations do not allow a hazardous waste site to be located over a public water source, regardless of what barrier is used.<sup>115</sup>

#### Serious concerns regarding the safety of the Barrel Trench burial area at PDC No. 1 are:

- There is only a 10- foot clay "liner" below the barrels.<sup>116</sup>
- The barrels contain solids and liquids including organics.<sup>117</sup>
- These barrels were placed in the landfill before environmental regulations for treating hazardous waste existed.<sup>118</sup>
- It has been over 20 years since the steel barrels were buried in the trench and the barrels were intended for transportation and not for long-term storage of chemicals and other hazardous and non-hazardous wastes.<sup>119</sup>
- A 1983 EPA report on the PDC No. 1 site refers to "contaminants found puddled on soil from leaking drums"<sup>120</sup>
- "The Shelbyville Outwash (Sankoty Sand) is located stratigraphically beneath the Illinoisan Drift. There is also a barrel trench in the site which has received hazardous waste. Barrels are no longer being placed in the trench. However, contaminated soil is now being placed in the trench to bring it to grade."<sup>121</sup>—Project Plan, Hazardous Waste Ground Water Task Force, PDC, 04/04/86

#### How reliable is the liner that protects our water source?

- HDPE liners are permeable even when intact.<sup>122</sup>
- HDPE liners will deteriorate and leak.<sup>123</sup>
- The PDC landfill liner system, consisting of plastic sheeting and clay layers, will, in time, deteriorate in its ability to prevent hazardous waste leachate from penetrating through it, which can lead to the pollution of groundwaters with hazardous and deleterious chemicals. This will cause the groundwaters to be a health threat to those who use them for domestic water supply, and will render the groundwaters unusable for domestic and many other purposes.<sup>124</sup>

#### What do the tests show about PDC's liner system?

- A report prepared *for* PDC by Environtech Consultants indicates expected leakage through the top liner of the PDC Environmental Management Facility, Landfill cell C-1.<sup>125</sup>
- PDC's witness confirmed that toxins have already been found in PDC leachate.<sup>126</sup> PDC's water analysis reports confirm these findings.<sup>127</sup>
- Experts on both sides agreed that low levels of contaminants from Peoria Disposal Co.'s hazardous waste landfill already have penetrated the aquifer below it.<sup>128</sup>

## What about the Pleasant Valley report? Didn't that say that the PDC No. 1 posed no danger?

- The Groundwater Protection Needs Assessment for Pleasant Valley Public Water District ("Pleasant Valley") dated September 24, 1992 concluded with respect to the PDC hazardous waste landfill that there is a "minimal potential hazard presented by this facility" to Pleasant Valley.<sup>129</sup>
- The Groundwater Protection Needs Assessment did not say the close proximity of the landfill to the Pleasant Valley wells was hazard-free. Furthermore, in coming to its conclusion, the Groundwater Protection Needs Assessment heavily relied on *PDC's modeling* of the groundwater flow velocities under the PDC site.<sup>130</sup>
- The facts set forth in Criterion 9, below, cast doubt about the validity of the *modeled* flow velocity numbers created by PDC as compared to the actual flow velocity numbers during 1989, 1990 and 1991, the same time period when the Groundwater Protection Needs Assessment was being formulated.

#### Monitoring performed by PDC may not be accurate.

- PDC does its own leachate testing, except for one annual test by the IEPA.<sup>131</sup>
- PDC's current and proposed groundwater monitoring system, employing vertical monitoring wells spaced hundreds of feet apart, is inadequate to detect leachate-polluted groundwater when it first reaches the point of compliance for groundwater monitoring. This can lead to offsite (adjacent property) pollution of groundwaters, without this pollution having been detected by the monitoring wells.<sup>132</sup>
- PDC's proposed approach for monitoring/maintenance of the landfill cover will not prevent, for as long as the wastes are a threat, water from penetrating through the cover and entering

the wastes to generate leachate that will contain hazardous chemicals at concentrations that threaten to pollute groundwaters.<sup>133</sup>

- Overall, PDC's approach toward analyzing the potential threat that the hazardous waste landfill represents to pollute groundwaters is superficial and based on inadequate evaluation of the long-term characteristics of the landfill liner system and the flow paths by which leachate that penetrates through the liner system can pollute groundwaters of the area.<sup>134</sup>
- Independent auditing of the PDC laboratory which performs water analysis testing documented 57 deficiencies.<sup>135</sup>
- In 4 of the 5 years from 2000 to 2004, PDC reported dangerous emissions of PM-10 pollutants into our air that exceeded the annual allowable emissions established by permit for the waste processing facility by the Illinois EPA.<sup>136</sup> Indeed, PDC's PM-10 emissions have been consistently high for the last five consecutive years reported, with 2004 being the highest.<sup>137</sup> This trend is especially concerning given the known risks associated with PM-10.

#### Peoria has had earthquakes!

- Disasters such as earthquakes or tornadoes may cause a breach of the barrier and contamination of the Sankoty.<sup>138</sup>
- PDC stated in their testimony "only relatively mild ground shaking would happen in Peoria"<sup>139</sup>
- Earthquakes in the central or eastern United States affect much larger areas than earthquakes of similar magnitude in the western United States.<sup>140</sup>
- For example, the San Francisco, California, earthquake of 1906 (magnitude 7.8) was felt 350 miles away in the middle of Nevada, whereas the New Madrid earthquake of December 1811 (magnitude 8.0) rang church bells in Boston, Massachusetts, 1,000 miles away.<sup>141</sup>
- The probability for an earthquake of magnitude 6.0 or greater is significant in the near future, with a 90 percent chance by the year 2040<sup>142</sup>

#### CRITERION 9—SUMMARY

There are two primary ways that toxins can reach the people of Peoria County in the event of a release of hazardous materials: air and water. Common sense dictates that to minimize the risk to the community, a hazardous waste site should not be located over public drinking water sources. The IEPA even requires it.

#### Enter PDC No. 1

Built directly over a part of the Sankoty Aquifer system, it places a heavy burden on the barrier that separates the toxins and our water supply. That barrier may not last as long as PDC would like us to believe. Some of Dr. Lee's concerns talk specifically to the longevity of the liner system and its role in protecting our water supply. He disagrees with Dr. Daniels on key points. A summary of his findings are located in his analysis of the PDC application.

#### Bottom line: This is a ticking time bomb.

The EPA states that water contamination can be extremely costly to clean up. In some cases, it may not even be possible. The very fact that monitoring and testing must be done proves that contamination is possible; otherwise, why test at all?

All of the hydrogeological consultants who testified at the hearing agreed that the site proposed for expansion sits on top of an aquifer system known as the Shelbyville Outwash, a deposit of sand which is hydraulically interconnected to the predominate Sankoty. Dr. Barrows, on behalf of PDC, testified that the two were actually "interfingered" at the places where they meet.<sup>143</sup>

The Sankoty aquifer underlies an area of more than 750 square miles.<sup>144</sup> The base of the existing and proposed expansion of the PDC landfill is hydraulically connected to a complex aquifer system that is an important source of domestic water supply for the Peoria area.<sup>145</sup> It supplies many irrigation wells, and in the tri-county area alone furnishes drinking water to 264,000 people in 39 communities.<sup>146</sup>

However, no one could tell exactly where the Shelbyville sands stop and where the Sankoty sands begin in relation to the site. Dr. Barrows referenced two known wells slightly to the southeast and northeast of the site as being indicative of Sankoty sands.<sup>147</sup> Dr. Barrows then stated at the hearing: "Now, where exactly you hit the Sankoty on this, I don't know." This uncertainty alone creates a sufficiently high public health concern to warrant denial.

What is certain is that wherever the transition does occur, it is all the same water we drink - the Shelbyville and Sankoty are interconnected and interfingered.<sup>148</sup>

PDC itself acknowledges that the Shelbyville sands underneath the site constitute the "aquifer of concern."<sup>149</sup> Thereafter, however, PDC took great pains to downplay the hydraulic connection by stating that the flow rates of movement of the water in the aquifer were very low, and for year 2003 under Area C, on the order of "approximately 0.017 feet per day (6.2 feet per year)."<sup>150</sup> Dr. Barrows himself calculated them from PDC supplied data to be about eight (8) feet per year, after taking into account the range of velocities under different parts of the site.<sup>151</sup> The Shelbyville sands were said by PDC to be about "15 to roughly 800 times less permeable than the Sankoty sand,"<sup>152</sup> with the clear implication being that even if contamination got down into the Shelbyville Outwash sands, it would not go anywhere fast.

PDC's groundwater velocity figures and flow rates, at least for the year 2003, are dramatically lower - <u>by over a factor of 10</u> - than what PDC's own studies showed for 1989, 1990 and 1991. According to the 1989 Annual Report Groundwater Monitoring prepared for PDC by Harza Environmental Services, Inc. ("Harza"), the flow velocities in the west area of Area C "ranged from 0.20 to 0.23 ft/day" and for the east-southeast part of the site, "ranged between 0.13 and 0.15

ft/day."<sup>153</sup> These flow velocities come out to up to 83.95 ft/year on the west side, and up to 54.75 ft/year on the east-southeast.

The velocities for 1989 were not an isolated event. The similar report for 1990, also prepared by Harza, shows west area ranges from 0.17 to 0.25 ft/day, and east side velocity stable at around 0.08 ft/day.<sup>154</sup> The report for the next year, 1991, was prepared by PDC Technical Services, Inc. and shows west area ranges from 0.157 to 0.211 ft/day, and east side velocity stable at around 0.12 ft/day.<sup>155</sup>

Whether by picking a dry (or slow) year, or taking mean values of hydraulic conductivity as opposed to averages, or by manipulating which slugs were tested for conductivity, or by not using all well information and related data available, PDC has certainly tried to put the best possible face forward on the issue all the while consciously seeking to minimize the impact of groundwater in the siting process. Fifty to Eighty (50 to 80) feet per year of potentially contaminated water moving toward the faster Sankoty sands, the Pleasant Valley wells, and the Illinois American wells is certainly a fact that should create concern. It certainly did for PDC.

Why should this flow velocity aspect of the groundwater interconnection be of concern? PDC acknowledges that groundwater protection is the most important factor in a siting application process. Yet, PDC tried to deflect the issues raised by the Peoria Families Against Toxic Waste, Heart of Illinois Group Sierra Club, and the Peoria medical community by maintaining a hard and fast position that there is no pathway for human exposure, through groundwater or otherwise. Like the disparities in groundwater velocities under the site, PDC's current position flies in the face of prior pathway exposure reports it has prepared.

To be in compliance with RCRA, PDC filed its Exposure Information Report ("Report") with the US EPA and IEPA in August of 1985 associated with its then operating hazardous waste landfill units, the Barrel Trench and Area B.<sup>156</sup> The present site, Area C, was in the planning process. The Report assessed the potential for human exposure to releases from the hazardous waste facility for a number of different potential pathways, including via the groundwater. The Report describes the landfill site geology in similar terms as in its current Application at issue. It includes an estimate of the flux of water passing underneath the site to be between 5,500 and 55,000 gallons of water a day.<sup>157</sup> The Report states that if "a contaminant plume, originating from the PDC site enters the Shelbyville Outwash underneath the site, the population in the vicinity of the site that use groundwater from the Shelbyville and Sankoty outwash aquifers would be directly affected."<sup>158</sup> The Report goes on to indicate that the contaminants would primarily affect a "3-mile radius of the site."<sup>159</sup>

Figure 2.2-1 of the Application shows that the Pleasant Valley wells are within 1.5 miles of the site.<sup>160</sup> George Armstrong testified that the closest Illinois American well is 2.9 miles to the south-southeast of the PDC site.<sup>161</sup> Two major public water supplies to the population of Peoria County are located within that 3-mile radius of the site.

PDC significantly overreached in its hearing testimony about there being no potential hazard to the Pleasant Valley Public Water District wells created by the proximity of those wells to the landfill. George Armstrong stated that the Pleasant Valley groundwater needs assessment study evaluated the PDC landfill, "but it was not considered to be a potential hazard and was given a hazard ranking of zero."<sup>162</sup> Nothing could be further from the truth. The Groundwater Protection Needs Assessment concluded that there is a "minimal potential hazard presented by this facility" to Pleasant Valley, far from being zero.<sup>163</sup>

Mr. Armstrong then omitted the fact that in formulating its conclusions, the Groundwater Protection Needs Assessment heavily relied on PDC's modeling of the slow groundwater flow velocities under the PDC site to show that it would take a long time for contamination from PDC to reach the Pleasant Valley wells. The PDC facility was found by Clark Engineers MW to be outside of the 5 year capture zone, the area from where water pumped out the wells comes from during a 5 year period.<sup>164</sup> Clark Engineers MW is silent on calculating how long it would take for water under the PDC landfill site to get to the Pleasant Valley well pumps. It merely said it was longer then 5 years.

Clark Engineers MW readily acknowledged in its report that the aquifer feeding the Pleasant Valley wells was widespread and contained various sands with different hydraulic conductivities. Hydraulic conductivities are greatly affected by the percentage of Sankoty sands are in the aquifer at any given point.<sup>165</sup> In fact, it described the Shelbyville Outwash sand conductivity (5 cubic feet per day per square foot (cfd/sq. ft.)) as compared to the conductivity of sand underneath the Pleasant Valley wells (80 cfd/sq. ft.) and the super conductivity of the type of sand under Illinois American Water wells (3850 cfd/sq. ft.).<sup>166</sup>

The fact that the Shelbyville Outwash is interconnected and interfingered with the Sankoty Outwash establishes the potential hazard associated with the PDC landfill being so close to the Pleasant Valley wells. Dr. Barrows himself stated he did not know where the better conducting Sankoty sands started. Far from being a "zero" risk, the close proximity of the hazardous landfill to the Pleasant Valley wells creates a clear and present potential risk for contamination of the public water supply.

Groundwater contamination can have a serious impact on public health. With this in mind, we refer you to our findings on the second criteria. It outlines how our residents are having their health compromised by pollution and shows how PDC contributes to the problem.

As called out previously, the Peoria County Board is entitled under the law to deny the Application if the Board determines that the *proximity* of the landfill expansion to the interconnected Sankoty/Shelbyville aquifer creates a present or future public health concern, even if all technical requirements of the application process are otherwise met. We believe that the evidence raises serious concerns on the issue of contamination of our public water source.

## PREVIOUS OPERATING EXPERIENCE AND PAST RECORD

The county board or the governing body of the municipality may also consider as evidence the previous operating experience and past record of convictions or admissions of violations of the applicant (and any subsidiary or parent corporation) in the field of solid waste management when considering criteria (2) and (5) under this Section.

## PDC's history speaks loud and clear.

- PDC's Ron Edwards testified that PDC provided incorrect data to the EPA in the most recently published (2003) TRI report.<sup>167</sup>
  - Mr. Edwards explained how sample measurements were improperly collected by PDC personnel.<sup>168</sup>
  - As a result, published EPA figures were wrong by a factor of 89 percent<sup>169</sup>
- A 2005 report by State of Wisconsin Department of Natural Resources (WDNR) Audit Chemist Diane Drinkman raised serious concerns regarding PDC's water testing facilities.
  - She writes, "At this time, I am concerned with the turnover of staff and what appears to be a systematic lapse in either sufficient training or substantiation that analysts are truly capable of meeting the requirements for staff in accordance with the Manual for Certification of Laboratories Analyzing Drinking Water."
  - Ms. Drinkman goes on to cite 57 "deficiencies" in the PDC inspection. Some are listed below.
    - <u>Deficiency</u>: "Laboratory does not always collect sufficient sample volume to ensure required quality control samples, e.g. matrix spike/matrix duplicates, are performed."
    - <u>Safe drinking water methods deficiency</u>: "Many of the deficient practices encountered for solid-phase extraction (SPE) of drinking water contaminants are a result of the apparatus used by the laboratory for these procedures."
    - o <u>Deficiency</u>: "The laboratory's method detection limits do not meet WDNR sensitivity requirements for the following analytical method and technique/analyte combinations: 6010B/ICP: Antimony, Arsenic, Beryllium, Cadmium, Lead, Selenium and Thallium"
    - <u>Deficiency</u>: "Logbooks for pipettor calibration (particularly those used in the metals preparation section) lack complete records."
    - <u>Quality Assurance and Quality Control Deficiency</u>: "Records of analyst training, including, but not limited to initial demonstration of capability (IDCs), were not available for all analysts performing drinking water analyses."
    - <u>Deficiency</u>: "The laboratory's reporting limits appear to be arbitrarily assigned; they are not mathematically-derived from the method of detection, as in a limit of quantitation."
    - o <u>Deficiency</u>: "On occasion, corrections are not properly annotated."
- IEPA inspection reports highlight problems with the way the PDC landfill has been operated. PFATW's request for additional current reports was denied by the IEPA. These were submitted into evidence by PDC.
  - "General Remarks: Permitted operating general and hazardous waste site. Site in approximately the same over-all condition as previously noted. (A mess) High winds accounted for a spectacular blowing litter problem. Some cover being applied on the western slopes. Spraying of liquid wastes was observed again. Same old stuff. No substantive change in procedure. Site inspected-observed with Stan Parsons of the Planning Section."

"Interview: Elmer and Royal Coulter. Elmer Coulter couldn't figure out who we (Stan and myself) were. Royal told us that he wanted to request an inspection on the following day as the site was near compliance. This statement taken in context with the condition of the site had us on our knees laughing. Nothing else of substance was said." —IEPA Inspection Report dated 11/17/77.<sup>170</sup> "General Remarks: Site was inspected shortly after opening time. All of the same refuse observed the previous night was still uncovered, + more freshly dumped garbage had been added to the piles. (Photos should show some of the same refuse of the previous night).No spreading + compacting had been done since previous night; cats were just being warmed up. On the west side of the site, leaching has been temporarily stopped by additional covering. I noticed sand in some of the cover material."

"Interview: Royal Coulter showed me the areas where the additional covering had been done + explained how they had contracted earth haulers for the job in an effort to clean up the site. He wanted to know when their supplemental permit applications would be approved again." —IEPA Inspection Report dated 10/21/77.<sup>171</sup>

"Permitted operating general and special waste site. Site being operated in general disregard of permit. Water being pumped off the site. (Probably drinkable). The site continues to be a mess. Operating outside the permitted fill area. Wastes from Diamond-Vogel being accepted without necessary supplemental permit. (Not known until after the inspection) Bad odor from ponds noticed east of the site. Cut made at west end of Barrel Trench to allow water to escape the site."

---IEPA Inter-Office Correspondence 06/22/1978<sup>172</sup>

- "The attached water sample analysis sheets indicate why we should not allow Peoria Disposal to continue operating as they have in the past. We should no longer entertain any of their quixotic schemes that result in water pollution of this magnitude. It is time that they either come down to earth and use accepted disposal methods within the framework of their permit of face the consequences."<sup>173</sup>—IEPA memo, 11/8/77
- "The Agency (has) several statistics on solvent types permitted for disposal/treatment. We also expressed our concern on the large number of supplemental waste stream permits identifying the waste only generically as 'solvent."<sup>174</sup> —IEPA memo 06/18/82
- The Hazardous Waste Unit of the Division of Land/Noise Pollution Control had this to say when PDC had their permit denied:
  - "Recent inspections made by our Field Operations Section have disclosed the fact that your sanitary landfill is not being operated in General Compliance. This violation of Chapter 7 of the Solid Waste Rules and Regulations makes your sanitary landfill ineligible to receive supplemental permits for disposal of Special and/or Hazardous Waste. To this end we are returning those applications forwarded to us denied."<sup>175</sup> —Division of Land/Noise Pollution Control letter dated 01/26/1978
- Here's a memo talking about the barrel trench:
  - "The Shelbyville Outwash (Sankoty Sand) is located stratigraphically beneath the Illinoisan Drift. There is also a barrel trench in the site which has received hazardous waste. Barrels are no longer being placed in the trench. However, contaminated soil is now being place in the trench to bring it to grade."<sup>176</sup>—Project Plan, Hazardous Waste Ground Water Task Force, PDC, 04/04/86

#### **EPA RECOMMENDATIONS**

#### Siting Issues

The EPA has specific recommendations about where hazardous waste sites should *not* be located.<sup>177</sup> Here are some key factors that they identify:

- "Locating hazardous waste management facilities in certain areas...may pose significant risks of releases and possible exposures to humans and the environment."
  - *The landfill is next to the city of Peoria, a major population center.*
- The problem with locating a HWM facility near high-value groundwater (the sole source of drinking water available) is that "contaminants can move quickly into the groundwater. It can be very difficult and expensive, if not impossible to clean up this contamination....Most of the time, groundwater cannot be cleaned for a reasonable cost and within a reasonable time frame. Removing contamination from groundwater may take hundreds of years."
  - The Sankoty Aquifer system is in close proximity to PDC No. 1.
- Ground shaking during an earthquake could cause damage to the structures that contain waste in HWM facilities and could "result in accidental releases to the groundwater, surface water, soil, and air."
  - Peoria has a history of earthquakes.
- The EPA states: "Hazardous waste management facilities should avoid locating near sensitive populations or in densely populated areas. Areas near schools, nursing home, day care centers, or hospitals should be avoided." Many states require setbacks from certain types of land use to "protect the public or the environment from potential exposure to hazardous waste."
  - Peoria has at least 23 schools and five daycare/preschools within 3 miles of the landfill. OSF and Methodist hospitals are approximately three and a half miles and Proctor hospital is just over four miles from the landfill.
- Siting hazardous waste facilities on unstable terrain can cause structural damage and lead to spills and leaks. "Poor foundation conditions can: disrupt landfill gas and leachate collection, rip landfill liner systems." The EPA recommends applicants check past mining activity when siting a hazardous waste facility.
  - Underground coal mines are located adjacent to the PDC property going back as far as 1881.<sup>178</sup> The Illinois State Geologic Survey won't guarantee the location of old mines because many were active before regulations were imposed.<sup>179</sup>



Locating hazardous waste facilities in the sensitive environments shown in this figure increases the risk of contamination.  $^{\rm 177}$ 

- In conclusion, "EPA recommends NOT siting hazardous waste facilities in sensitive locations for the following reasons:
  - Land Use: Sensitive populations such as the elderly, children and the sick are more affected by toxic exposures.
  - High-Value Groundwater: Contaminants are transported quickly. Cleanup is costly and difficult.
  - Earthquake Zones: Ground fractures and shaking damage structures, leading to spills.
  - Unstable Terrain: Soil movement can shift and damage structures causing waste releases.

## **Quality of Life Concerns**

The EPA also has specific recommendations regarding quality of life concerns of the community. Some of their issues are listed here:<sup>180</sup>

- "Local communities often have understandable concerns about why their site was selected and how the facility will affect their quality of life. These concerns encompass a broad array of issues that range from health and environmental effects to social and economic impacts. Social and economic issues are not evaluated during the RCRA permitting process, but this does not diminish the legitimacy of the community's concerns and the need to address them...when siting a facility."
- "Quality of Life reflects the values a community places on its cultural, social, and natural
  resources. Local residents strive to preserve those resources for current and future
  generations. ...local governments should recognize and respect these often intangible values
  and integrate them into their planning."
- "Quality of Life is difficult to define and measure but is critically important to communities involved in RCRA hazardous waste siting and permitting." Quality of Life concerns can include: location, nuisance, cultural, social, and economic concerns."
- Quote from EPA Administrator Carol Browner: "There is no doubt in my mind that when a neighborhood or community becomes informed and involved, they will do a far better job of deciding what is right for their children, for their air, for their water, than any government agency."
- "Agencies and permittees must recognize that community values and feelings are a legitimate aspect of environmental health issues."

## **EPA RECOMMENDATIONS – SUMMARY**

These EPA recommendations are grounded in the industry's best practices. The fact that PDC has done a poor job of heeding them speaks volumes to the manner in which PDC management runs the company and its past practices.

#### **OPPOSITION TO THE LANDFILL EXPANSION**

PFATW stands united with others on this issue. Here is a partial list of the many, many businesses and individuals who have voiced opposition to this expansion measure:

- OSF Medical Staff
- Methodist Medical Staff.
- Proctor Medical Staff
- OSF Administration
- Peoria Medical Society
- Moss Bradley Neighborhood Association
- Uplands Neighborhood Association
- Neighborhood Alliance (the umbrella group for the Peoria neighborhood associations)
- Altamont Park Neighborhood Association
- Bill Rutherford
- Heart of Illinois Group Sierra Club
- Barbara Van Auken (Peoria City Council)
- Gary Sandberg (Peoria City Council)
- Pleasant Valley School
- Students of Richwoods HS
- Citizens for Our Environment
- River Rescue

The general public has been vocal too. The public file has been flooded with letters from concerned citizens. River Rescue has reported that they have collected over 6000 petition names.

## CONCLUSION

Thank you for taking the time to read this document. We realize that hazardous waste is a topic that most people would prefer not to talk about, we certainly don't.

The people of Peoria County have done more than their share in accepting these toxins up to now, but *enough is enough*! We do not want an additional 15 years or more of hazardous waste dumped on our community that will risk the health of future generations.

This document outlined compelling and factual reasons to vote against the PDC hazardous landfill expansion.

- Peoria County's high pollution score is clear.
- The impact that this type of pollution has on health is clear.
- How PDC contributes to this pollution is clear.
- The danger of contamination of the Sankoty Aquifer system is clear.
- The county's long-term financial risk post closure is clear.
- The future negative effect on property values is clear.
- The fact that this landfill expansion may hurt economic growth is clear.

The only thing not clear is Peoria County's land, air and water.

Questions surround Peoria County's future if the facility were to be sold to either a non-local or foreign corporation. PDC downplayed this during the hearings and offered to have the county board approve the sale. Unfortunately, that offer has many conditions. Under new ownership, PDC's current business model may change dramatically within the allowances of the new permit. This would open the door to the acceptance of a whole range of new toxins, possibly increased traffic and risk of spills. And how the new owner decides to run operations could put Peoria County at even more risk.

There are alternatives. A Caterpillar plant in South Carolina recently developed a process to recycle 100 percent of its hazardous waste. Not only was it good for the environment, but it even saves the company money each year. No hazardous landfill required.

Hundreds of letters have been sent in and are now on record by concerned, voting citizens opposing the landfill. We have supplied ample reason based in credible evidence to say "No!" We are confident that you'll do the right thing and vote against the PDC expansion.

Peoria County can start to heal itself. We can make our area a cleaner and healthier place to live. Peoria County has the capacity to be a welcoming place for industry and families alike. We can *thrive* as a community.

Voting against this measure is the first step.

Thank you,

Peoria Families Against Toxic Waste

## GLOSSARY

6010B/ICP - A soil testing method used by the US EPA

Aliquot – An aliquot part of a number or quantity is one which will divide it without a remainder; thus, 5 is an aliquot part of 15. (Brainy Dictionary website, <u>www.brainydictionary.com</u>)

Analyte – An analyte is the substance or chemical constituent that is undergoing analysis. It is the substance being measured in an analytical procedure. (Wikipedia website, <u>http://en.wikipedia.org/wiki/Main\_Page</u>)

Benzene – a colorless volatile flammable toxic liquid aromatic hydrocarbon  $C_6H_6$  used in organic synthesis, as a solvent, and as a motor fuel -- called also *benzol*. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

Daily cover – a term assigned to the requirement that landfills cover fresh trash with six inches of dirt at the end of each day in order to control nuisance conditions such as flies, rodents, odors, and windblown litter. Alternative daily cover is cover other than dirt, such as crushed glass, POTW waste sludges, pulp and paper mill waste, coal combustion by-products, construction and demolition debris and treated contaminated soil. (University of Wisconsin-Green Bay Solid and Hazardous Waste Education Center website, http://www.du/Demt/churge/links/www.blandfill.htm)

http://www3.uwm.edu/Dept/shwec/links/uwgb/landfill.htm)

Dioxin – any of several heterocyclic hydrocarbons that occur especially as persistent toxic impurities in herbicides; *especially* TCDD. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

Elution – from Elute, extract; *specifically*: to remove (adsorbed material) from an adsorbent by means of a solvent. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

Ester – any of a class of often fragrant compounds that can be represented by the formula RCOOR' and that are usually formed by the reaction between an acid and an alcohol with elimination of water. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

Esterification – from Esterify, to convert into an ester. (Merriam Webster Online Dictionary, <a href="http://www.m-w.com/">http://www.m-w.com/</a>)

Heterocyclic – relating to, characterized by, or being a ring composed of atoms of more than one kind. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

I-L sample – Intra-laboratory sample (abbreviation found in report by Diane Drinkman of the Wisconsin Dept. of Natural Resources, evidence submitted by PFATW)

Initial Demonstration of Capability (IDCs) – from State of Wisconsin Administrative Code, section NR 149.14, Quality Assurance/Quality Control, Laboratory Certification and Registration Program. (Wisconsin Dept. of Natural Resources website, <u>http://www.dnr.state.wi.us/org/es/science/lc/APPLICATION/SpecAppReqs.htm</u>)

Landfill cell C-1 - one section of PDC's Environmental Management Facility.

Leachate – a solution of product obtained by leaching, which is to dissolve out by the action of a percolating liquid. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

Matrix – the component or substrate (e.g., surface water, drinking water) which contains the analyte of interest. (First Environmental Laboratories, Inc. website definitions page, <u>http://www.firstenv.com/definitions.htm</u>)

Matrix (Spike) Duplicates – Intra-laboratory split samples spiked with identical concentrations of target analyte(s). The spiking occurs prior to sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix. (First Environmental Laboratories, Inc. website definitions page, <u>http://www.firstenv.com/definitions.htm</u>)

Matrix Spike – An aliquot of sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix. (First Environmental Laboratories, Inc. website definitions page, <u>http://www.firstenv.com/definitions.htm</u>)

PCB *or* polychlorinated biphenyl – any of several compounds that are produced by replacing hydrogen atoms in biphenyl with chlorine, have various industrial applications, and are poisonous environmental pollutants which tend to accumulate in animal tissues. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

PDC No. 1 - Peoria Disposal Company's Landfill #1. Accepts hazardous waste.

**Pipettor** – an industry term taken from Pipet, a small piece of apparatus which typically consists of a narrow tube into which fluid is drawn by suction (as for dispensing or measurement) and retained by closing the upper end. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>) For a picture of a pipettor, please visit <u>http://www.eandkscientific.com/pipettor%20stands.htm</u>.

Recharge Area – an area that allows water to enter an aquifer. The area is particularly vulnerable to any pollutants that could be in the water. If pavement is constructed over this area, less water can enter the aquifer. This could mean a water shortage to those people using the groundwater from the aquifer. (Purdue University departmental website, <a href="http://pasture.ecn.purdue.edu/AGEN521/epadir/grndwtr/recharge\_area.html">http://pasture.ecn.purdue.edu/AGEN521/epadir/grndwtr/recharge\_area.html</a>)

SDWA – US Safe Drinking Water Act (acronym)

Solid-phase Extraction – (SPE) is an extraction method that uses a solid phase and a liquid phase to isolate one, or one type, of analyte from a solution. It is usually used to clean up a sample before using a chromatographic or other analytical method to quantitate the amount of analyte(s) in the sample. The general procedure is to load a solution onto the SPE phase, wash away undesired components, and then wash off the desired analytes with another solvent into a collection tube. (University of Adelaide, Australia, Dept. of Chemistry website, <a href="http://www.chemistry.adelaide.edu.au/external/soc-rel/content/spe.htm">http://www.chemistry.adelaide.edu.au/external/soc-rel/content/spe.htm</a>)

**Split Samples** – Aliquots of sample taken from the same container and analyzed independently. In cases where aliquots of samples are impossible to obtain, field duplicate samples should be taken for the matrix duplicate analysis. These are usually taken after mixing or compositing and are used to document intra- or inter-laboratory precision. (First Environmental Laboratories, Inc. website definitions page, <u>http://www.firstenv.com/definitions.htm</u>)

Superfund – A federal program established in 1980, to locate, investigate and clean up uncontrolled or abandoned hazardous waste sites, such as abandoned warehouses and landfills on thousands of properties where such practices were intensive or continuous. Citizen concern over the extent of this problem led Congress to establish the Superfund Program. The EPA administers the Superfund program in cooperation with individual states and tribal governments. The office that oversees management of the program is the Office of Superfund Remediation Technology Innovation (OSRTI). (US EPA website, <u>http://www.epa.gov/superfund/about.htm</u>)

THM or Trihalomethane – any of various derivatives CHX<sub>3</sub> of methane (as chloroform) that have three halogen atoms per molecule and are formed especially during the chlorination of drinking water. (Merriam Webster Online Dictionary, <u>http://www.m-w.com/</u>)

TRI – Toxics Release Inventory, a publicly available EPA database that contains information on toxic chemical releases and other waste management activities reported annually by certain covered industry groups as well as federal facilities. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990. (US EPA website, <u>http://www.epa.gov/tri/</u>)

VOC or Volatile Organic Compounds – emitted as gases from certain solids or liquids. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects. (US EPA website, <u>http://www.epa.gov/iaq/voc.html</u>)

WDNR - Wisconsin Department of Natural Resources (acronym)

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