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Illinois Pollution Control Board, Clerk's Office

James R. Thompson Center, Suite 11-500

100 West Randolph Street

Chicago, IL 60601

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Pollution Control Board

PC# 31

Dear Acting Chairman G. Tanner Girard and IPCB Members:

I, Dr. Richard Hahin, a community member of the town of Cortland would like to address the unfairness of the siting decision (ref PCB 2010-103) made by the DeKalb County Board on the Municipal Landfill to be operated by Waste Management Corp. Below I would like to briefly describe myself and then address the relevant issues of unfairness of the process and decision.

I am a neurophysiologist and neurotoxicologist at Northern Illinois University (NIU). I am currently a professor in the Biological Sciences Department and have been at the school since my arrival in 1985. I study the electrophysiological properties of excitable cells (nerve, heart, and muscle) and agents that bind to and alter cell membrane ion channels and alter cell signaling and action potential propagation. I received a BS degree in Electrical Engineering from Michigan State University in 1968. I received my Ph.D. in Medical Physiology from the University of Maryland School of Medicine, 1978, postdoctoral training at SUNY Stony Brook (neurophysiology) and the University of Iowa Medical School. I was a visiting assistant professor in the Biological Sciences Department at the University of Iowa and the John Curtin Research Institute at the Australian National University in Canberra prior to arriving at NIU. I also was a consultant at the Anesthesia Research Laboratories (Brigham & Women's Hospital) at Harvard Medical School in the summer of 1989.

I will raise a number of Issues regarding the siting decision below:

#### **Public Hearing Notification**

Despite the fact that I live about one mile from the proposed site, I received no notification from Waste Management or the Town of Cortland that a siting application had been submitted and public hearings would be held to obtain community input on the decision. Information about the time and date of the hearings were posted in the local newspaper (DeKalb Daily Chronicle), however, I have never subscribed to it because it has so little content. A few of the DeKalb County Board (DCB) members are or were faculty at NIU, yet no information was provided to notify faculty and staff that hearings were to be held to consider the application despite the importance of the decisions to be made and its relevance to everyone in the surrounding area including NIU. One of the DCB members, Dr. Patricia Vary, was a member (emeritus) of the Biological Sciences Dept. and had an office in the building, yet never sent an email or any other notification to her fellow faculty. I first became aware of the proposed siting only after seeing a sign (Stop the MegaDump) on a walk to lunch one day in DeKalb. This was after the hearings had already occurred. My town (Cortland) also never provided most of its residents notification because when I became aware of the date of the vote by the DCB and went door to door in Cortland to notify others, less than 1 out of 8 of my neighbors had any awareness of what had transpired.

### **Communications with DCB**

Upon finding out about the scheduled DCB vote I sent an email to my fellow faculty about the upcoming vote and sought a discussion. I received an Email from Dr. Pat Vary who directed me to the DCB website and I obtained a copy of the application and read all the other available information. Dr. Vary also later said (in a private talk in the hall) she could not directly speak with me about the upcoming vote because it represented an ex parte communication. Despite this statement she spoke to me for about 10 minutes. She said "she spent a considerable time working on the project" and that the opponents of the application were making erroneous statements. She also stated that there were "no acceptable alternatives" for disposing the County's waste. In addition she stated that the site would be safe and appropriately monitored and was acceptable. She also stated the funds received from Waste Management because of the agreement would be used to build a new jail for the County. It became clear to me in that brief conversation that she had already made her decision. Dr. Vary said to me that she and the other DCB members were acting as "judges" of the merits of the decision to site and could not speak to me. At that time I had not made an opinion of the merit of a siting or not. I attempted to contact other DCB members but was not successful.

### **Puzzlement**

I have published a few articles that relate to the issues raised by the siting. I have studied a number of aliphatic hydrocarbons and their ability to alter action potentials (APs) and sodium channel currents ( $I_{Na}$ ). I was able to mathematically predict their ability to alter and block APs and  $I_{Na}$ s depending on their physical chemical properties. Dr. Vary was previously a chair of Biological Sciences and surely in that role was aware of my work, yet never asked me to help the DCB make the best decision about the health hazards of the agents that would be released into the air. It became clear to me after reading all the relevant documents on the DCB website that many engineering and health issues were not being addressed. The DCB members including Dr. P. Vary had little if any expertise in toxicology and engineering, yet were to make a crucial long-lasting decision based on the input of only a few "expert" opinions involved in the process.

### **Town Board Agreement and Cortland Special Election Township Vote**

The Cortland Town Board entered into a monetary agreement with Waste Management not to lodge an objection to the expansion of the landfill without any official input from the citizens of the town. However, on 18 May 2010 a special Cortland Township electors meeting was held to approve a resolution prohibiting any expansion of the DeKalb County Landfill. More than 200 citizens (electors) attended the meeting and I introduced the resolution to be voted upon. According to the Illinois Township Code (60 ILCS 1/30-120) Sec. 30-120, "The electors may prevent the deposit of night soil, garbage, or other offensive substances within the limits of the township. This section does apply to refuse disposal facilities regulated by the Illinois Department of Public Health and the county in which the facilities are located. (Source: P.A. 82-783; 88-62). The electors were overwhelmingly opposed to the proposed landfill expansion by vote with the following resolution: "Be it therefore resolved by a vote of the Electors of Cortland Township that no expansion of the landfill located in Cortland Township along Somonauk Road just South of I-88 will be allowed."

### **DCB Vote**

The DCB vote was conducted in a peculiar manner. An overflow group of individuals opposed to the siting were present. It was unclear if the meeting was a hearing or not. According to the chairperson who conducted it, it was not a hearing but simply a vote, and no person in the audience was allowed to speak. Dan Kenney was permitted to ask a question, but no one else was allowed to speak prior to a

vote. Dan Kenney asked if he would be permitted to provide an alternative engineering assessment but was denied to do so. Since this was such an important decision that would affect many people, it appeared strange that not even one individual was permitted to briefly speak prior to a vote.

### Participation

My only other ability to participate in this process was via an opinion piece letter sent to the DeKalb Daily Chronicle following the publication of a letter by Dr. Vary describing why she voted "Yes" to siting. In my response to her article, I briefly explained how a number of hazardous hydrocarbons would be released from the site via combustion (polychlorinated dibenzodioxins and polychlorinated dibenzofurans) as was demonstrated in many other currently operating municipal landfills in this and other countries. Aromatic and chlorinated hydrocarbons, pesticides, pharmaceuticals and pathogens will likely be found at the site similar to that found in other municipal landfills. In addition I pointed out the problems associated with containment over such a long period and the inadequacy of the procedures put in place by Waste Management to ensure no toxic waste is deposited into the site. Because of the restrictions on the number of words in the article I was unable to explain the problems associated with H<sub>2</sub>S monitoring and the fact the landfill will not control H<sub>2</sub>S levels through feedback inhibition using engineering control system technology. Instead, warnings will be provided to the citizens if levels exceed a standard. However, the siting application states that an unspecified contingency plan will be in place and be used when H<sub>2</sub>S exceeds 10 ppm. The levels tolerated without warning exceed the occupational exposure standard (OES; 5 ppm) used in the Working Group on the Assessment of Toxic Chemicals (WATCH) United Kingdom (Occup Envir Med 2003; 60:308-312. H<sub>2</sub>S alters metalloenzymes including cytochrome oxidase and the LC50 in rats is 444 ppm for a 4 hr exposure period (Health and Safety Executive. DGV Criteria Document. Scientific expert group on occupational exposure limits – hydrogen sulphide. SEG/CDO/40, 1992). WATCH set their OES to 5ppm since studies of human volunteers showed that short exposures (15-30 minutes at 5-10 ppm) while undergoing maximal exercise shift respiration to an anerobic pattern and lactate levels consistent with cytochrome oxidase inhibition. Long term exposure to H<sub>2</sub>S at 5-10 ppm are not well studied- yet the expanded landfill will be located right near a Cortland school.

### Concluding statement

The DeKalb County Board, the Cortland Town Board, and Waste Management did not attempt to notify all residents who would be locally (within in 1-1.5 mile radius) affected by the proposed expansion so most residents were unaware of the hearing dates and could not participate in the process. The Cortland Town Board entered into a monetary agreement with Waste Management without consultation with its residents. When made aware of the process the residents voted to stop it consistent with the Illinois Township Code (60 ILCS 1/30-120) Sec. 30-120. In their application, Waste Management only offers to protect the economic property interests of those within ½ mile of the facility, while unfairly ignoring those meters away from this limit. From my conversation with Dr. P Vary of the DCB, it appears the overriding concern of the DCB to make the siting was also monetary and this produced a process that unfairly reduced and negated community input and concerns.

Sincerely yours,



Richard Hahin, Ph.D. (neurophysiology)