May 07 08 02:41p Thomas Madigan 309-673-2612 ORIGINAL CLERK'S OFFICE John Therriant MAY 0 7 2008 STATE OF ILLINOIS Pollution Control Board IPCB John -The 1st 5 page of the brief tition are the same mostly withe the Exhibite written in . Monday, Reference Shibite, Best, Ton Davis. PS. They request in that the accepted.

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### TO: ILLINOIS POLLUTION CONTROL BOARD

5/5/08

Brief from Tom Edwards for PCB case 08-42 (See Constitutional authority page 5)

### Synopsis:

1-- The Peoria Disposal Co.'s toxic waste landfill at Peoria is in the most hazardous location in the nation relative to the health and well being of people.

- 2 -- Inspection, oversight, and control need to be vastly improved, and it needs to be safely closed as soon as possible.
- 3 -- Best alternative: The state needs to find the safest site possible for successive purpose it, and contract out and oversee its operation.

  MAY 0.7 2008

Status:

The Illinois Environmental Protection Agency is proposing changes in Polar Control Board governing the Peoria Disposal Co.'s toxic waste landfill here. Yet it contains major omissions, and changes that will weaken the permit. This is crucial to the Peoria area environment because this "landfill" a) directly abuts the west edge of the City of Peoria, a densely populated area; b) sits right over the aquifer from which most of Peoria and adjacent communities draw their water; and c) takes in toxic waste from (so far) up to 15 other states. And this EPA landfill permit is slated to govern operation and closure of the PDC landfill for the next 30 years

### Overview of situation:

The toxic waste landfill of the Peoria Disposal Co. will be a major hazardous environmental factor here, literally, forever. It is the elephant in our living room that we have avoided acknowledging -- a critical mistake by both PDC and government. To deal with it is going to take longterm combined financing and effort by both. All sides need to work together to achieve a total solution -- and an example for others. We can.

### We Need Far Better Oversight:

Of the still remaining active commercial toxic waste landfills in the nation (16 in only 13 states), the one at Peoria, owned by Peoria Disposal Co.(PDC), is in by far the most dangerous location in regard to the health and welfare of people and a municipality.

Industries and communities of up to 15 states (so far) send their hazardous waste to be "buried", literally, on a hill in Peoria that is as close as just 50 feet above the sand aquifer from which most of the Peoria area draws its water supply. It is the only active commercial toxic waste landfill in the top half of the nation from this side of Indianapolis to the Rocky Mountains.

PDC's toxic waste "landfill" at Peoria is the only still active one in the nation that:

- 1) Sits <u>right above</u> let alone close to an aquifer from which is pumped the majority of a municipal area's drinking water, and
  - 2) Is also located immediately upwind of the air Peorians must breathe.

Only nuclear waste is ranked more of a health hazard than the phalanx of toxic chemicals (843 of them) that are permitted by the federal and state EPAs to be put in PDC's Peoria

landfill, which abuts the west city boundary line. And there is only one site in the nation, in Nevada's desert mountains, being planned for a nuclear waste disposal site.

Water and air pollution are the twin hazards of PDC's toxic waste landfill. It is a pollution hazard, present and potential, to the Peoria area's vital ground water supply. And though research has shown air pollution to be a health hazard in the vicinity of toxic landfills elsewhere (see below), the IEPA has given that possibility virtually no attention at PDC's landfill, saying it isn't a hazard there.

### Specific Points and Recommendations:

- 1 -- Independent inspections and testing direly needed: EPA's permit puts virtually the entire responsibility on PDC for monitoring, testing, and reporting on its own landfill and performance rather than vice versa. EPA inspectors say they visit the landfill once, occasionally twice, a month. In effect, the EPA is having, the "permitee" inspect himself. In contrast, the City of Peoria has inspectors on the job checking road and sidewalk projects the entire 8-hour work day.
- 2 -- Illegal volume change: Original volume capacity limit for waste in the new (post 1987) part of the landfill was originally set at 1.84 million cubic yards, but was upped by PDC and EPA to 2.63 million cubic yards in 2002.

  [Permit page V-1]. That is a huge 43% increase. Public hearings are required for major changes. One was not held, making that expansion illegal.

b. Moreover, when the total capacity of the seven (7) cells of this part of the landfill are added, they total 2.87 million c.y., considerably more than the stated 2.63 million c.y.total permitted limit cited on the same page.

- c. Also, PDC has evidently exceeded even the 2.63 total volume limit. The above all needs outside review and investigation. See Exhibit 4
- 3 -- Reinstate quarterly monitoring for leaks, problems. Testing of water samples from monitoring wells, now done quarterly, is proposed to instead be collected semi-annually, and a number only annually. Leaks could then go on 6 to 12 months without discovery, greatly hindering leak detection and increasing pollution.

  Continued quarterly monitoring, at the least, is a vital safeguard. Even more so after landfill closure, as problems worsen over time.
- 4 -- Much leaking reported from landfill's new section by independent consultants. It must be solved. Or it will be a constant, growing hazard for the Peoria area, as the landfill sits over its drinking water aquifer. But none of this leaking was found or reported either by PDC or the IEPA. A county hired engineering consultant found Cell No.1 to be leaking. But a privately hired geo-hydrologist Charles Norris of Denver, CO, found that all seven cells of the newer part (built since 1987) of the landfill, all with liners to prevent leaking, in fact do leak. Even the newest ones with "double liners" are leaking, probably straight down through the bottom, he reported. (Therefore likely missing the monitoring wells.)

- 5 -- Pre-law, unlined section of landfill is ignored and likely leaking. Must be monitored. PDC's landfill has been in operation 79 years, 58 years before the state began in 1987 requiring plastic liners, drains, etc. Because this older but larger section is "pre-law" the EPA does little if any inspection and monitoring of it. (Love Canal, N.Y., had a pre-regulation landfill. Residents there went to Washington and pounded on Congressional doors to get action to relieve them of the pollution sickening their community. 750 homes were razed. It woke up EPA and the nation. Congress then set up a massive fund to help the host of other places with pre-law dumps. It quickly ran out of money.)
- 6 -- A dangerous location for people. As stated above, Peoria is the nation's only metro area with a toxic waste landfill sitting over the city's main water source, and immediately upwind of a densely populated area. Research in New Jersey and five European Union countries of communities near toxic waste landfills showed significantly higher rates of birth defects, premature births, and in New York State a 15% higher rate of strokes. Air pollutants from landfills are the main suspect. Peoria Co reports a very high infant mortality rate.
- See Exhibits 5, 6, 7,8,9 6. Peoria County has by far the highest chemical Toxic Release Inventory of any county in Illinois, 4.3 times higher than Cook County's (Chicago), and l6th highest in the nation, according to a 2002 USEPA survey. In the survey PDC's toxic releases were over 21 times higher than the next highest in the county, which was ADM's ethanol plant. (News report to be attached.) See Exhibit 10
- 7 -- \*Air pollution: The denied reality: The IEPA has long been saying there is no air pollution from the PDC landfill. But its closest monitor is 4.5 miles away on a bank building roof. And recent detailed studies (noted above) in New York State, New Jersey, and the European Union show air pollution to be a major health problem for people living in the vicinity of toxic waste landfills. In an unauthorized visit into the PDC landfill last year I found behind a knoll a cluster of pipes 12 to 15 inches in diameter sticking up 7 or more feet out of the ground. A whiff of the fumes they were venting sent me reeling backwards. I reported this to an IEPA inspector of the site. He replied that he and the EPA were unaware of any air pollution or vents for emissions on PDC's site, and asked me where the vents were. I trust he reported this vital knowledge to higher-ups. Other air pollutants from the site are certainly being dispersed by PDC elsewhere. This needs to be thoroughly and publicly investigated by the federal EPA, which has suzerainity over the site.
- 8 -- Barrel trench: This needs an official public investigation! The metal barrels certainly must all be rusted away and their toxic contents loose. This trench, reported as containing 35,000 cubic yards of waste, was in operation from 1986 to 1990. It must be venting pollutants to the air. But a groundwater monitoring well slated for installation under the barrel trench has yet to be installed 20 years later.
- 9 -- Test for and prevent escape of very volatile & highly toxic mercury. Only 2% by weight of extremely toxic mercury is allowed in the present and proposed

permit. But for a 5-ton load of waste, 2% would amount to 200 pounds -- a whale of a lot. But because only grab samples from the top of any incoming load are tested, and loads may be left sitting out for weeks or months after arrival, any mercury would have volatilized into the city's air. Its actual quantities are, therefore, unaccountable.

- 10 -- Taking & testing groundwater samples: PDC sets the day, time and means for collecting samples, not the EPA. Also, the bulk of the testing of the samples is reportedly given over by the EPA to PDC, which PDC also does in its own Peoria lab.
- 11 -- Problem reporting: The EPA permit gives PDC 30 days to report any problems it may find, even breakdowns in the landfill. That is an inordinate length of time.
- 12 -- Why is this landfill for toxic waste located right in a heavily populated area when there are over 100,000 acres of former stripmine land in the 4county Peoria area, and much more elsewhere? The IEPA says the legislature has given it no authority to take into account "location," only operation rules, and that location is up to the land owner and local officials. Exhibit 11
- 13 -- The public hearing held by the county board two years ago on PDC's landfill was the longest (6 days and evenings) and most attended in county history. The county board voted 12 to 6 not to issue a new operating permit.

Previously a Circuit Court ruling in Chicago held that any increase in original landfill capacity, up, down, or sideways, is expansion.

\* LEGAL BASIS FOR CASE PCB 08-42, — see mort page, 5
PREFACE TO BRIEF FROM TOM EDWARDS,

Tom Edward

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902 W. More av.

Pearia, IC 61606

Legel bani for PCB 08-42, Tom Edwards brief.

CONSTITUTION OF THE STATE OF ILLINOIS ARTICLE XI ENVIRONMENT

Section 1. Public Policy - Legislative Responsibility.

The public policy of the State and the duty of each person is to provide and maintain a healthful environment for the benefit of this and future generations. The General Assembly shall provide by law for the implementation and enforcement of this public policy.

Section 2. Rights of Individuals.

Each person has the right to a healthful environment. Each person may enforce this right against any party, governmental or private, through appropriate legal proceedings subject to reasonable limitation and regulation as the General Assembly may provide by law.

### PREAMBLE TO THE ILLINOIS ENVIRONMENTAL PROTECTION ACT

- 2. (a) The General Assembly finds:
- (i) that environmental damage seriously endangers the public health and welfare, as more specifically described in later sections of this Act;
- (vi) that despite the existing laws and regulations concerning environmental damage there exists continuing destruction and damage to the environment and harm to the public health, safety and welfare of the people of this State, and that among the most significant sources of this destruction, damage, and harm are the improper and unsafe transportation, treatment, storage, disposal, and dumping of hazardous wastes:
- (b) It is the purpose of this Act, as more specifically described in later sections, to establish a unified, state-wide program supplemented by private remedies, to restore, protect and enhance the quality of the environment, and to assure that adverse effects upon the environment are fully considered and borne by those who cause them.
- c) The terms and provisions of this Act shall be liberally construed so as to effectuate the purposes of this Act [720 ILCS 5/1-1 et seq.].

from Tom Edwards Petitioner 902 W. Mors Ave Peoria, IL 6/606 May 07 08 02:43p Thomas Madigan 309-673-2612 p.7

### LIST OF REFERENCE EXHIBITS FOR PETITIONER'S BRIEF FOR PCB 08-42

- 1 -- U.S.Army Corps of Engineers (Data on nation's hazardous waste landfills)
- 2 -- Nation's Most Dangerous Toxic Waste Landfill Location
- 3 -- Letter to Illinois EPA director Doug Scott
- 4 -- Section V-1 of Revised Landfill Permit (erroneous volumes)
- 5 -- Hazardous Waste Landfills Linked to Birth Defects in 5 European Countries
- 6 -- Down Syndrome Abstract Re: Hazardous Waste Landfills
- 7 -- Hazardous Waste Sites and Stroke in New York State
- 8 -- Birth Complications Linked to New Jersey Hazardous Waste Landfills
- 9 -- Hazards of the PDC Hazardous Waste Landfill
- 10-- Don't Allow Hazardous Landfill to Expand (Re: highest Toxic Release Inventory)
- 11-- Insanity to Bury Hazardous Waste Over Water Supply (Rutherford letter)

# May 07 08 02:44p

# Data From U. S. Army Corps of Engineers, Feb., 2006

Exhibit1

### Comparison to other Commardelelaz Waste Landfills

Owner	City	ST	Population w/in 3 mile radius (ECHO)	Distance to closest large (recognizable) city/town (Googla Earth)	Local Host Fee	State Taxee/Fees	Perpetual Care Fund
Chemical Waste Management		AL		70'mi SW of Tuscaloosa	\$2,40/ton to County where site located; and Sumter County levies addi \$5/ton	Based on toxicity of waste \$41.60/ton - D, F, K codes requiring stabilization and PCB \$66.60/ton - U Codes \$103.60/ton - P Codes \$11.60/ton - K061 (electric arc dust)	
• .				٠.	-	\$1.00/ton on all waste received for disposal	· .
Clean Harbors	Westmortand	CA	· _	127 ml E of San Diego	n/a	\$229.62/ton - Extremely haz, waste and	·
Clean Harbors	Buttonwillow	CA		27 ml W of Bakersfield	n/a	restricted haz, waste \$46,38/ton - RCRA haz, Waste	<u> </u>
Chemical Waste Management Clean Harbors	Kettleman City	CA	<u> </u>	54 ml S of Fresno 58 ml E of Denver	r/a \$120,000 annually + 2%	GCDO	
				:	gross tipping fees (state statute)	\$600 annual operating fee	,
US Ecology/American Ecology	Grand View	(D		53 mi S of Bolse	no .	\$30.00/ton - RCRA défined waste \$20.00/ton - same site 0-2,500 tons \$10.00/ton - same site 2,500 - 12,500 \$5.00/ton - same site 12,500 - 25,000 \$2,50/ton - same site 25,000+ tons	
Peorla Disposal Company	Pottstown	IL	53,190	partially located w/in City of Peoria	\$1.00/ton to Peoria County (i expansion permitted)	f \$18.18/cubic yard - RCRA defined waste \$6.06/cubic yard - treated waste	
Heritage Environmental	Roachdale	IN		39 ml W of Indianapolis	25% of amount collected from state's Haz. Waste Disposal Tax	\$11.50/lon	
Chemical Waste Management	Sulphur	ĻA	1,955	12 W of Lake Charles	no	\$30/ton of haz waste generated & disposed of at the same site \$40/ton of haz waste disposed of in LA at a site other than generated \$100/ton of extremely haz waste disposed of in LA	
Wayne Disposal, Inc FACILITY CLOSED	Belleville	MI	NA .	21 mi SW of Dearborn	ло .	\$10.00/ton - RCRA defined waste excludes K061, treated waste, incineration ash	

# Data From Ch.S. Army Corps of Engineers, Feb, 2006

### Comparison to other Commercial Haz Waste Landfills

Owner	City		w/in 3 mile radius (ECHO)	Distance to closest large (recognizable) city/town (Google Earth)	Local Host Fee	State Taxes/Fees	Perpetúal Care Fund
US Ecology/American Ecology	Beatty	NV	39	117 mi NW of Las Vegas	\$.80/ton to Nye County	\$18.50/ton - RCRA defined waste \$3.00 - PCBs and treated waste	\$2.80/ton + \$.07/cubic foot for perpetual care and maintenance
Chemical Waste Management	Model City	NY		8.5 mi NE of Niagara Falls	no .	Regulatory Program fees and \$27.00/ton	agreement between NYS Dept of Environmental Conservation and CWM Chemical Services
Envirosate of Ohio	Oregon	OH.	43,581	4.3 ml SW of Toledo	по	\$9.00/ton - RCRA define waste . \$2.00/ton - treated waste	\$11 million deposited by Envirosate in 1991
Clean Harbors Lone Mountain Facility	Waynoka	OK .		137 ml NW of Oklahome City	10% of amount collected from State's Facility Monitoring Fees to an organization comprising of several counties	\$9.00/ton - RCRA define waste \$2.00/ton - treated waste	
Chemical Waste Management	Arilington	OR	48	116 ml S of Yakima, WA	\$1.18/ton to Gilliam County	\$20.00/ton - RCRA defined waste and PCBs \$7,50/ton - K081 \$20.00/ton - same site 0-2,500 tons \$10.00/ton - same site 2,500 - 12,500 \$5.00/ton - same site 12,500 - 25,000 \$2.50/ton - same site 25,000+ tons	
US Ecology/American Ecology	Robstown	ΤX		22 ml NW of Corpus Christi, TX	no .		
Waste Control Specialists	Andrews	ĪΧ	36	45 ml NW of Midland/ 35 ml N of Odessa	no	\$5,000/surface acre annual facility fee (Min. \$2,500 and max. \$25,000)	
Enviracere of Utah - FACILITY CLOSED	Cilve	טדי			10% of the fees received to county facility located in	\$28.00/ton - RCRA defined waste \$14.00/ton - treated waste	Envirocare deposits \$400,000/year since 2001; Fund available after 100 years
Clean Harbors Lone & Grassy Mountain	Grantsville	UT	3	36 mi SW of Salt Lake City	(Utah Code)	\$4.75/ton - PCBs	1

Exhibit L

To Illinois Pollution Control Board -- Testimony Case PCB 2006-184
Nation's Most Dangerous Toxic Waste Landfill Location?

April 5,'07

Both at the state and local level we need to realize that no city or town in the nation has more people than Peoria living not only within 3 miles of an active toxic waste landfill, but also immediately adjacent to one. Not only more, but generally 50 times more! That includes such huge cities as New York and Los Angeles.

Peoria has 54,000 living within 3 miles of Peoria Disposal Co.'s hazardous waste landfill abutting the city's west side, plus Bradley University's students. The site itself is densely bordered to its fence with houses and apartments, nursing homes, and nearby schools.

Even more crucial, though, is that Peoria is evidently the only place in the United States that has a toxic waste landfill that:

1) Sits even near its aquifer, let alone atop a shallow sand-gravel aquifer from which is pumped via wells most of the water for the 200,000 people of the Greater Peoria area:

2) And is also located immediately <u>upwind</u> of the city and the <u>air it breathes</u>. \*(And increases in severe maladies (birth defects, premature births, strokes) in the vicinity of such landfills elsewhere have been linked by researchers to escaping toxic furnes.)

Of the 16 still operating commercial toxic waste landfills in the nation listed by the U.S. Army Corps of Engineers, most are out in the boundocks. Eight have only 3 to 50 residents within 3 miles and are far (40 to 150 miles) distant from population centers, 4 have 139 to 759 people and are nearly as isolated, one has 1,955, and another 4,227.

Only one, Oregon, Ohio, (near Toledo) with 43,580 people within 3 miles, has near the proximity of Peorians to the hazards of a toxic waste landfill -- but via just air contamination. Its water comes from Lake Erie. Oregon is currently going to court to block expansion of the privately owned toxic waste landfill in its community.

Remember, the EPA permit for the PDC landfill allows <u>843</u> of the most toxic chemicals known, and PDC is petitioning to add to the list very toxic PCBs, a chemical now banned from usage. It also takes <u>lead</u> compounds, which are banned from landfills in Europe. With the 2005 closure of the toxic waste landfill in Chicago, much <u>more</u> may be coming here.

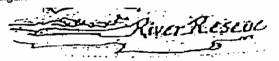
ALSO REMEMBER, THERE ARE 100,000 ACRES OF STRIPMINED LAND WITHIN 10 TO 40 MILES OF PEORIA, INCLUDING TRACTS OF 15,000 AND 5,000 ACRES WITH NO PEOPLE LIVING ON THEM, AND VERY FEW EVEN NEARBY.

YET <u>ALL</u>. THE FOCUS SO FAR HAS <u>ONLY</u> BEEN ON CONTINUED OPERATION OF THE PDC LANDFILL. RATHER, <u>A NEW LOCATION</u> CAN CERTAINLY BE FOUND BY THE STATE AND/OR THE LANDFILL OWNER.

IT IS <u>IMPERATIVE</u> THAT "<u>FOREVER</u>" CLOSURE OF THE PDC LANDFILL AT PEORIA BE BEGUN <u>NOW</u> WHILE IT (HOPEFULLY) IS STILL AT A MANAGEABLE SIZE, <u>AND</u> WE ARE ON TOP OF THE PROBLEM, <u>AND</u> WE HAVE THE PRESENT OWNER-OPERATOR ON BOARD TO HOLD ACCOUNTABLE.

From: Tom Edwards, River Rescue, 902 W. Moss Ave, Peoria, IL 61606

Tom Edwards



Exhibit?

Doug Scott Director, IEPA (copy to Peoria County Bd.)

April 10, 2007

Dear Director Scott,

The attached paper, "Nation's Most Dangerous Toxic Waste Landfill?" aptly describes the location of Peoria Disposal Co.'s toxic waste landfill adjoining Peoria's west edge.

As the paper tells, only one of the nation's 15 other active hazardous waste landfills even approximates Peoria's close-by density of population. And Peoria has a dense population right up to and against the landfill's fenced enclosure!

Even worse, the PDC landfill, as the map shows, is a) the only one in the nation that sits atop the aquifer from which a city and surrounding towns pump most of their water, and b) is the only one directly against and upwind of a city, and the toxic fumes we now realize constantly escape from such landfills into the air we breathe, to our detriment.

And the toxic wastes from as many as 15 states so far are being brought to Peoria to be dumped, actually, on a hilltop packed with hazardous, toxic materials.

I don't believe that -- given that knowledge -- a sovereign state and a major county of that state will not immediately take direct action to correct and remove that undenialable danger to the health and well being of its citizenry.

However, the Greater Peoria area is fortunate in that it is in a location in which remedial action can quickly be taken. It has over 100,000 acres of former stripmines within 10 to 40 miles of the city and along major highways. Most are now pasture land.

Certainly there are far superior -- and hugely safer -- sites for such a landfill, even in this area as well as others, that can be found by the state and/or landfill operator. And the PDC landfill at Peoria can be *forever* closed as safely and securely as possible.

The Peoria County Board took strong, wise action when it voted last May (as is its legal prerogative) not to issue a permit for expansion of the PDC landfill beyond its original permitted area and volume.

PDC is trying to overturn that decision via an appeal to the Illinois Pollution Control Board. But it is obvious that was a vital and just decision that needs to be upheld.

If a new landfill is deemed necessary, then there needs to be a combined effort to immediately find and secure the best, most suitable site possible.

Sincerely, Tom L. Edwards, River Rescue

cc: "Nation's Most Dangerous ..."

"Solutions to Hazardous. . . Landfill"

902 W. Moss Ave.

Peoria,IL 61606

Exhibit 4

Revised: October 2007 ILD000805812 Page V-h

Section V LANDFILLS This was increased

From 1.84 in 2002, without

Fublic hearing. City, 1.84 million coy)

### SUMMARY

Peoria Disposal Company operates a ninety (90) acre facility, seventy-four (74) of which are approved for disposal units. The total waste capacity is approximately 2,638,580 cubic \( \subseteq \) yards. Industries served by the site include earthmoving and agricultural equipment manufacturers, chemical and steel companies, and breweries. Some wastes are to be treated at the Stabilization Unit at the facility prior to disposal in a landfill cell. The final landfill unit is scheduled to close in the year 2009.

This section presents permit conditions for the landfill according to the regulatory requirements of 35 Ill. Adm. Code 724 Subparts N (Landfills) and G (Closure).

### В. WASTE IDENTIFICATION

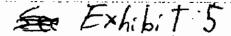
- The landfill disposal units are located as shown on the site topographic map contained n Appendix B-2 of the approved permit application.
- The Permittee may dispose the following wastes in landfill cells, subject to the terms of this permit:

		Surface Area	Description
	Approximate	Dimensions of	of
Landfill Cell	Total	Landfill Cell	Hazardous
Designation	Capacity (c.y.)	(Acres)	<u>Waste</u>
	y +!		
Barrel Trench	35,000	14	See Attachment C
Area			for Waste List and
Section A	³ 6,500	8 .	Hazardous Waste Nos.
Section B	190,000	10	and
Trench C-1	425,929	7.3	Non-hazardous
Trench C-2	453,846	6.4	wastes identified
Trench C-3	<i>7</i> 75,939 `	7.3	in Condition X.H.2
Trench C-4	982,865	17.0	
	2,810,079		

The Permittee is prohibited from disposing any waste in the permitted units not 3. included in Condition B. 2. of this Section.

231,499 c.y. more than total waste copacit, gaven above 2,638,500). Figures don't jive!

Thornes Madigal



### Best Practice of Medicine - Patient Guide

'Press Ctrl-P (PC) or 架-P (Mac) to print this page

## **HEALTHNews**

1/25/02

### Hazardous waste landfills linked to birth defects

NEW YORK, Jan 25, 2002 (*Praxis Press*) Babies are more likely to have chromosomal abnormalities, such as Down's syndrome, if their mothers live within a few miles of a hazardous waste landfill, according to the results of a study published in the journal *Lancet*.

Previous research suggests that babies of mothers living within about two miles of a hazardous waste landfill are more likely to have non-chromosomal abnormalities, such as neural tube defects and cleft palate.

A multinational team of researchers included in the study more than 2,000 babies whose mothers lived various distances from hazardous waste landfills in the United Kingdom, Denmark, France, Belgium, and Italy. The researchers recorded how far the babies' mothers lived from the landfills as a possible measure of the mother's exposure to chemicals from the landfill. At the time of birth (or early termination of a pregnancy), 9% of the babies in the study had chromosomal abnormalities.

Compared with babies whose mothers lived about two to four miles from the landfill, babies whose mothers lived about 0 to 2 miles from the landfill were 41% more likely to have chromosomal abnormalities. This pattern was present even after the researchers took into account other factors that might influence the occurrence of these abnormalities, such as a mother's age and socioeconomic status.

The study's findings suggest that babies are more likely to have chromosomal abnormalities if their mothers live within a few miles of a hazardous waste landfill. The researchers emphasize that additional studies will be needed to determine if chemicals from the landfills are actually responsible for the abnormalities.

### References:

Vrifheid M, Dolk H, Armstrong B, et al.: Chromosomal congenital anomalies and residence near hazardous waste landfills. Lancet. Jan 26 2002; 359:320-22. [http://www.thelancet.com/journal/vol/iss/full/llan.359.9303.original\_research.19269.1]

15#

Exhibit 6

Down Syndrome Abstract of the Month: Apr 2002

Chromosomal congenital anomalies and residence near hazardous waste landfill sites

Vrijheid M, Dolk H, Armstrong B, Abramsky L, Bianchi F, Fazarinc I, Garne E, Ide R, Nelen V, Robert E, Scott JE, Stone D, Tenconi R.

Lancet 2002 Jan 26;359(9303):320-2

EUROCAT Central Registry, Environmental Epidemiology Unit, Dept. of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, UK.

### Abstract:

Previous findings of the EUROHAZCON study showed a 33% increase in risk of non-chromosomal anomalies near hazardous waste landfill sites. Here, we studied 245 cases of chromosomal anomalies and 2412 controls who lived near 23 such sites in Europe. After adjustment for confounding by maternal age and socioeconomic status, we noted a higher risk of chromosomal anomalies in people who lived close to sites (0-3 km) than in those who lived further away (3-7 km).

Our results suggest an increase in risk of chromosomal anomalies similar to that found for non-chromosomal anomalies.

My comments:

Eurohazcon is a collaborative study among a number of congenital abnormality registries in Europe. Sixteen public health institutes were involved in the initial 1998 study (you can read it here). In this study, information about births of infants with chromosomal anomalies were obtained from England, Denmark, Belgium, France and Italy. 23 landfill sites were selected for their containing hazardous waste (as defined in a 1991 Eurocat document); a proximal zone was defined as being within 3 kilometers (1.8 miles) of the site, and compared with a distant zone of 3 to 7 kilometers away from the landfill. 245 cases of infants with chromosomal anomalies were identified, and compared with over 2000 control babies.

For all chromosomal anomalies, the odds of being near a site were 40% more. likely than being distant from a site. For Down syndrome, the odds were 36% higher for living near the site.

Exhibit 7

BioMed Central

# Environmental Health: A Global Access Science Source

Open Access

Research

Hazardous waste sites and stroke in New York State Ivan Shcherbatykh<sup>1,4</sup>, Xiaoyu Huang<sup>2</sup>, Lawrence Lessner<sup>2,3</sup> and

David O Carpenter\*1,3

Address: <sup>1</sup>Department of Environmental Health and Toxicology, School of Public Health, University at Albany, SUNY, One University Place, A217, Rensselaer, NY 12144, USA. <sup>2</sup>Department of Biometry and Statistics, School of Public Health, University at Albany, SUNY, One University Place, A217, Rensselaer, NY 12144, USA. <sup>3</sup>Institute for Health and the Environment, University at Albany, SUNY, One University Place, A217, Rensselaer, NY 12144, USA. <sup>3</sup>Institute for Health and the Environment, University at Albany, SUNY, One University Place, A217, Rensselaer, NY 12144, USA and <sup>4</sup>McMaster University, Centre for Evaluation of Medicines. 105 Main St. E., P1 Level, Hamilton, Ontario L8N 1G6, Canada

Email: Ivan Shcherbatykh - shcheriy@mcmaster.ca; Xiaoyu Huang - xiaoyu.h@gmail.com; Eawrence Lessner - LLessner@uamail.albany.edu; David O Carpenter\* - carpent@uamail.albany.edu

\* Corresponding author

Published: 29 August 2005

Environmental Health: A Global Access Science Source 2005, 4:18 doi:10.1186/1476-069X-4-18

Received: 28 April 2005 Accepted: 29 August 2005

This article is available from: http://www.ehjournal.net/content/4/1/18

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### Abstract

Background -: Environmental exposure to persistent organic pollutants (POPs) may lead to elevation of serum lipids, increasing risk of atherosclerosis with thromboembolism, a recognized cause of stroke. We tested the hypothesis that exposure to contaminants from residence near hazardous waste sites in New York State influences the occurrence of stroke.

Methods -: The rates of stroke hospital discharges were compared among residents of zip codes containing hazardous waste sites with POPs, other pollutants or without any waste sites using information for 1993–2000 from the New York Statewide Planning and Research Cooperative System (SPARCS) database, containing the records of all discharge diagnoses for patients admitted to state-regulated hospitals.



Results -: After adjustment for age and race, the hospitalization rate for stroke in zip codes with POPs-contaminated sites was 15% higher than in zip codes without any documented hazardous waste sites (RR 1.15, 95% CI, 1.05, 1.26). For ischemic stroke only, the RR was 1.17 (95% CI 1.04, 1.31). Residents of zip codes containing other waste sites showed a RR of 1.13 (95% CI, 1.02, 1.24) as compared to zip codes without an identified waste site.

Conclusion -: These results suggest that living near a source of POPs contamination constitutes a risk of exposure and an increased risk of acquiring cerebrovascular disease. However further research with better control of individual risk factors and direct measurement of exposure is necessary for providing additional support for this hypothesis.

### **Background**

Cerebrovascular disease is a major public health problem [1]. In addition to well-documented modifiable risk factors of stroke, there is evidence for a link between a broad category of environmental factors and stroke, such as air pollution [2], environmental tobacco smoke [3], metals

[4], pesticides [5], and other anthropogenic factors, including persistent organic pollutants (POPs).

POPs are chlorinated organic compounds [polychlorinated biphenyls (PCBs), dioxins and chlorinated pesticides] that are resistant to degradation and able to bio-

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Exhibit 8

America's Newspapers: Document Display

Thomas Madigan

Page 1 of 2

NewsBank InfoWeb

# America's Newspapers

Estimated printed pages: 1

Washington Post

September 15, 1997

Edition: FINAL

Section: A SECTION

Page: A2

Column: SCIENCE NOTEBOOK

BIOLOGY: BIRTH COMPLICATIONS LINKED TO LANDFILL

Author: Joby Warrick

### Article Text:

A study of pregnant women and infants near a New Jersey landfill offers new evidence of the possible heaith risks of living near bazardous chemical waste dumps.

Two scientists analyzed 25 years of birth records in Pitman, N.J., and found that complications increased with proximity to a waste dump on the outskirts of town. Mothers who lived closest to the Lipari landfill were twice as likely to deliver prematurely, compared with women living more than a half-mile away, and their babies weighed an average four ounces less at birth, the researchers report in the journal Environmental Health Perspectives.

"The magnitude of this effect is about as bad as the birth weight reduction that is associated with cigarette smoking during pregnancy," said lead investigator Michael Berry of the New Jersey Department of Health.

The scientists ruled out other possible explanations, such as economic or cultural differences. The nothers living nearest the toxic waste dump were generally wealthier and better educated than those who lived farther away.

All the mothers in the survey drank from the same municipal water supply. Berry suspects that the regnancy problems resulted from breathing finnes from industrial compounds such as benzene and nethylene chloride, which were dumped in great quantity at the landfill during the 1970s.

\* Both are allowed in He POCland Eill

ttp://infoweb.newsbank.com/iw-search/we/InfoWeb?p\_jaction=print&p\_docid=0EB2C2A... 2/23/2004

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**×1.6.1** 7 January, 2004

2005

Hazards of the PDC Hazardous Waste Landfill

Peoria Disposal Co. is seeking a permit from the county board to greatly expand its toxic waste landfill on the city's west edge (bounded by Rt. 8, Forrest Hill, Molleck, and Reservoir Rds.) and operate it for at least 15 more years. It is the only one left in the Greater Midwest, one of only 14 left in the nation, and has received highly toxic waste from 15 states. It is the most important issue facing the city-county -- and its future. 95% of the direct impact would be to the city. But the city's health is also the county's.

\*There are 843 toxic chemicals - many the most toxic known to man short of nuclear waste - that the Illinois EPA permits PDC to bury in this 74-acre landfill. The EPA requires testing groundwater for just 20 of them - and has PDC itself do most testing.

\*But there is no EPA testing for air pollution from the landfill, though chemicals do volatilize through soil into our air, indeed, PDC has stack pipes in its landfill to vent gases.

\*A recent joint 5-country study in Europe found that babies born of mothers living within 2 miles of hazardous waste landfills had 40% more birth defects and 33% more of other abnormalities [The Lancet 1/26/02. Countries were Britain, Denmark, France, Belgium, Italy]. A New Jersey study revealed twice as many premature births, ascribed to airborne furnes. In 2005 a New York state study revealed 15% more strokes in adults near such landfills. \*Peoria has a dense population (over 25,000) living downwind from and within a 2-n radius of the PDC landfill (from Farmington Rd., University Ave., and Charter Oak and Big Hollow Rds). This area includes 265 residential streets lined with single and multi-

\*Groundwater contamination is a longterm concern. It travels for miles. This landfill adjoins the aquifer from which much (60%) of the city water supply is drawn. Also, it is close to Kickapoo Creek and Illinois River. Chemical toxins can last for centuries, "forever," experts warn. But the plastic and clay landfill liners are shortlived. And monitoring methods "are not" fail-safe. "Every landfill leaks," states Robert Kennedy Jr.

family homes and apartments - - plus Bradley University. BUT its effect goes far beyond.

\*PDC's current EPA permit allows 2.6 million cubic yards of waste and expires in 2006: According to published reports, it wants to add more states and at least six (6) million more cubic yards (2 million tons) over the next 15 years. That would fill 158 of one of the 30-story Peoria Twin Tower buildings. Do we want a mountain of highly toxic waste from throughout the Midwest and beyond in the heart of the county and on the city's doorstep?

DEFINITION OF HAZARDOUS WASTE in state law: Waste which "may cause or significantly contribute to an increase in mortality or ... serious, irreversible, or incapacitating. illness, or pose a substantial... hazard to human health or the environment..."

WHAT WE WANT

\*\*Reject expansion of the landfill. (Peona County Board has full authority to do this.)

\*\*Begin now the permanent closure of this landfill while we are alert to the problems.

\*\*Become a community voice urging the state and nation to require and accelerate development of means to (a) detoxify hazardous waste and (b) recycle it to beneficial. uses instead of burying it in the ground where it remains bazardous and a menace.

- Compiled from many sources by Tom L. Edwards

COVER)

Journal S.

# Don't allow hazardous landfill to expand in Peoria County

Thank you to the Journal Star for reporting that Peoria County releases the greatest amount of toxic chemical pollutants in Illinois, and is in the top 10 percent of the nation's worst countles, according to the U.S. Environmental Protection Agency's 2002 "Toxic Chemical Release Inventory."

Specifically Peoria County is ranked 16th in the nation for toxic chemical releases, and has 4.3 times more than Cook County, which includes Chicago.

The story concentrated on Archer Daniels Midland. Its pollution, thou serious, was under one million pour of toxic chemicals released into the environment, compared to 21 million The story concentrated on Archer Daniels Midland. Its pollution, though serious, was under one million pounds environment, compared to 21 million from Peoria Disposal Company (PDC). Those releases include cancer-causing compounds, The EPA says PDC's toxic deposits are considerably greater than any other state company.

Though ADM discharges via a smokestack and PDC is mainly a landfill, volatile chemicals evaporate up through soil into the air and seep out into water supplies. PDC's landfill adioins the residential west side of Peoria. It also abuts the aquifer from which much of the city's water supply comes and is close to Kickapoo Creek. which drains into the Illinois River. As every swimming pool develops leaks, so does every landfill.

PDC's state permit authorizes it to deposit in its landfill ever 1,000 of the most toxic chemicals known, and it receives them from 12 to 14 states. It wants to extend its soon-to-expire state permit to triple the landfill's volume and operate 30 more years. This is not the kind of publicity the city wants. To heal the problem would be grand publicity. And we certainly can.

> TOM EDWARDS **PEORIA**

When I colled the Illinois EPA about this, it was not ever aware that the federal EPA eren had a Toxic Release Inventory. The then IEPA director asked me 10m Ehvards where to get it.

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Exhibit 11

SUNDAY SUNDAY 29, 2006 STAR

# Insanity to bury hazardous waste over water supply

I have been following the issue of proposed expansion of the Peoria Disposal Company's hazardous waste landfill on the west edge of Peoria, and attended PDC's presentation to the Peoria City Council last November.

This landfill is the worst thing I have seen in my 90 years in this community I say that without reservation.

It is amazing that, in this era of space technology, we are building a mountain here of a couple million tons of a huge assorting of terribly toxic charginals in the heller in a

of a couple million tons of a huge assorting to terribly toxic chemicals in the beiler in at a plastic liner will forever prevent them from leaking into the aquifer, from which over half of the Peoria area's tap water is pumped. PDC's toxic waste landfill sits right over that precious groundwater supply Plastic breaks and cracks with age and stress, and chemicals can eat into and through it.

Moreover, it is the only hazardous waste land

fill in Illinois and the greater part of the Midwest, and one of only a few in the nation. Many of the most toxic chemicals are permitted to be buried here, and 15 states send them here.

The majority of these chemicals are volatile, meaning they liferally dissipate into the fif we breathe. Yet there is no air pollution testing, and this factor is being ignored by our government.

If maniferric keeps handling its waste this way we are going to go the way of the thingsairs. Of the billions we spend on space programs, we must spend as much, indeed, even far more on caring for and preserving our space ship Earth. We have to find ways to detectify and recycle all such waste. It is insanity

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