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STATE OF ILLINOIS
Pollution Control Board

Case Nos. 122798, 122813 (cons.)

IN THE SUPREME COURT OF ILLINOIS

THE PEOPLE OF THE STATE OF ILLINOIS	)	On Appeals from the
	)	Appellate Court of Illinois,
Petitioner-Appellant,	)	Third Judicial District,
	)	Nos. 3-15-0637 & 3-16-0058
v.	)	(cons.)
)	
ILLINOIS POLLUTION CONTROL BOARD,	)	There Heard on Direct
	)	Administrative Review of an
Respondent-Appellee	)	Order of the Illinois Pollution
(No. 122798).	)	Control Board,
	)	No. R2012-009(B)
)	
COUNTY OF WILL AND WILL COUNTY	)	Marie Tipsord
LAND USE DEPARTMENT,	)	Hearing Officer
)	
Petitioners-Appellants,)	
)	
v.)	
)	
ILLINOIS POLLUTION CONTROL BOARD,)	
)	
Respondent-Appellee)	
(No. 122813).)	

**BRIEF OF *AMICI CURIAE* ENVIRONMENTAL LAW & POLICY CENTER
AND CITIZENS AGAINST RUINING THE ENVIRONMENT
IN SUPPORT OF PETITIONERS-APPELLANTS**

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The Environmental Law & Policy Center and Citizens Against Ruining the Environment respectfully submit this *amici curiae* brief pursuant to Ill. Sup. Ct. R. 345(b) in support of the position of Petitioners-Appellants the People of the State of Illinois, County of Will, and Will County Land Use Department.

INTERESTS OF AMICI CURIAE

Amicus Environmental Law & Policy Center (“ELPC”) is a Midwest-based not-for-profit public interest environmental protection and economic development advocacy organization, which is headquartered in Chicago. ELPC’s members reside across the state of Illinois and care deeply about protecting our right to a healthful environment, including safe, clean drinking water in our communities. *See* ILL. CONST. 1970, art. XI, § 2. ELPC has worked for many years to protect Illinois’ groundwater resources from contamination and provide for clean water supplies. For example, ELPC initiated and intervened in cases before the Illinois Pollution Control Board involving groundwater contamination issues and has prepared expert public reports focused on groundwater protection policies in McHenry County, Will County and other areas of the state.

Amicus Citizens Against Ruining the Environment (“CARE”) is a not-for-profit environmental organization based in Will County, Illinois. As the oldest environmental not-for-profit group in Will County, CARE works to ensure clean and safe drinking water for local communities. CARE has advocated for many years to support groundwater monitoring for clean construction and demolition debris policies and operations, including submitting public comments to the Illinois Pollution Control Board to reinstate groundwater monitoring requirements.

The Illinois Pollution Control Board's failure to act sufficiently to protect safe drinking water supplies through groundwater monitoring threatens the interests of *Amici*, their members and the general public to achieve the "right to a healthful environment" guaranteed under Article XI of the Illinois Constitution. ILL. CONST. 1970, art. XI, § 2. This right to a healthful environment clearly includes the right to safe, clean, healthy drinking water. The Board's rejection of groundwater monitoring at construction and demolition debris and uncontaminated soil fill sites weakens groundwater protection throughout the state, and creates unnecessary health risks for the people of Will County and other communities in which people rely on groundwater for their drinking water. The Board's "penny wise and pound foolish" decision opts for a reactive response to water supply contamination instead of proactive prevention. Sadly, this misguided approach mirrors the flawed policies that led to the tragedies in Flint, Michigan and Galesburg, Illinois. This *amici curiae* brief explains additional reasons why the Court should rule in favor of the People of the State of Illinois, Will County and the Will County Land Use Department by reversing the Illinois Appellate Court's Opinion and the Pollution Control Board's decision below.

BACKGROUND

Sensible, proactive groundwater protection policies are essential for the Illinois public's health and the economy. Will County and eight other counties in Illinois source their drinking water mostly—and in some cases entirely—from groundwater. ILL. ENVTL. PROTECTION AGENCY, ILLINOIS GROUNDWATER PROTECTION PROGRAM 16

(2012).¹ These communities' populations are projected to increase by 120 percent in the next thirty years. By 2050, 2.6 million new people will live in Illinois areas dependent on groundwater for their drinking water supplies. *Id.* In addition to these households, Illinois businesses also rely on clean groundwater for industrial projects, agricultural use and commercial activities. Contamination at the surface can leach into groundwater by means of precipitation and run-off, meaning that water carries the contaminants downward through permeable soil into groundwater resources. Gravity and pressure then move the groundwater through aquifers—underground layers of permeable rock—into which communities like Will County drill wells to pump out and obtain their drinking water. In addition to contaminating wells, polluted groundwater can also reach rivers, lakes and other water bodies due to the hydrologic connection between surface water and groundwater. ILL. ENVTL. PROTECTION AGENCY, ILLINOIS INTEGRATED WATER QUALITY REPORT AND SECTION 303(D) LIST 2 (2016).²

The vital importance of clean groundwater for drinking water, industrial projects, agricultural use, and commercial activities led the Illinois General Assembly to pass the Illinois Groundwater Protection Act in order to better protect this natural resource from contamination. The Illinois Groundwater Protection Act recognizes “the essential and pervasive role of groundwater in the social and economic well-being of the people of Illinois, and its vital importance to the general health, safety, and welfare” and requires that “waste and degradation of the resources be prevented.” 415 ILCS 55/2(b) (West

¹ Available at <http://www.epa.state.il.us/water/groundwater/groundwater-protection/2010-2011/full-report.pdf>.

² Available at <http://www.epa.illinois.gov/Assets/iepa/water-quality/watershed-management/tmdls/2016/303-d-list/iwq-report-ground-water.pdf>.

2014). The Act accordingly directs state agencies to enact regulations that will safeguard the state's groundwater as a natural and public resource.

In 2010, the General Assembly amended the Illinois Environmental Protection Act specifically to direct the Illinois Pollution Control Board ("Board") to create "standards and procedures necessary to protect groundwater" at clean construction and demolition debris and uncontaminated soil fill sites. P.A. 96-1416, eff. July 30, 2010; 415 ILCS 5/22.51(f)(1), 22.51a(d)(1) (West 2010). Clean construction and demolition debris ("CCDD") and uncontaminated soil fill ("USF") are the leftovers from construction, renovation, and demolition projects, which site owners and operators may use as fill material at quarries and other excavations. Recycling construction and demolition ("C&D") material has important benefits such as reducing the amount of waste normally diverted to landfills. Nonetheless, as the General Assembly recognized when it passed sections 5/22.51 and 22.51a, CCDD and USF sites pose environmental and public health risks.

Construction and demolition (C&D) materials are produced from the debris of roads, buildings and landscaping and may carry incidental amounts of paints, metal sheeting, solvents, and chemical products that contain known human health hazards such as lead, mercury, and polychlorinated biphenyls. U.S. ENVTL. PROTECTION AGENCY, DATA GAP ANALYSIS AND DAMAGE CASE STUDIES: RISK ANALYSES FROM CONSTRUCTION AND DEMOLITION DEBRIS LANDFILLS AND RECYCLING FACILITIES 1 (2012).³ Many construction sites use single containers for waste collection, meaning that "clean" and "contaminated" C&D materials are stored together for periods of time.

³ Available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockkey=P100NRCJ.txt>.

Patrick J. Dolan, et al., *Concepts for Reuse and Recycling of Construction and Demolition Waste*, U.S. ARMY CORP. OF ENGINEERS 30 (June 1999).⁴ Comingled waste complicates the process of separating out the “clean” debris unless separation is performed by hand or by specialized machinery. If the waste includes hazardous materials like lead-based paint, then comingling can contaminate the entire container of debris. Contaminants present in these materials can leach into groundwater through precipitation and run-off, which carry them downward through permeable soil into groundwater resources. The likelihood of leaching is particularly high at unlined quarries where no barrier separates fill material from the permeable soil underneath. As a result, contaminants in CCDD and USF materials can accumulate in groundwater over time and cause unhealthful contamination.

Pursuant to Sections 22.51 and 22.51a of the Illinois Environmental Protection Act, the Illinois Environmental Protection Agency (“IEPA”) proposed regulations to address groundwater contamination threats caused by CCDD and USF operations. *See* 415 ILCS 5/22.51, 22.51a (West 2010). These regulations included procedures such as material certification, testing and groundwater monitoring.

The Board approved most of the IEPA’s proposed regulations, but rejected Subpart G—the groundwater monitoring requirement—over objections from the IEPA, the People of the State of Illinois, and members of the public. The Board was “unconvinced that groundwater monitoring . . . [was] required for the protection of groundwater.” *County of Will v. Illinois Pollution Control Bd.*, 2017 IL App (3d)

⁴ Available at http://acwc.sdp.sirsi.net/client/en_US/search/asset/1002266;jsessionid=FAEE3D91AB91CE5DB23877FE64090F19.enterprise-15000.

150637-U, ¶ 50 (Sept. 12, 2017). The Board predicated its reasoning on the belief that the front-end regulations alone, namely material certification and inspection, sufficiently protected groundwater at CCDD and USF sites, and thus the actual monitoring of potential groundwater contamination was somehow not necessary. *See id.* Will County, the Will County Land Use Department, and the People of the State of Illinois challenged the Board's decision as arbitrary, capricious and unreasonable.

On September 12, 2017, a divided Illinois Appellate Court issued a 2-1 Opinion upholding the Board's decision. *See id.* ¶¶ 3, 81. Justice Wright states in his dissenting Opinion:

Unlike my respected colleagues, I conclude the Board's decision to reject Subpart G, runs counter to the evidence and is so implausible that the Board's reasoning cannot be ascribed to a difference of viewpoints or the product of the Board's superior expertise. The Board's conclusion, that front-end regulations are sufficient to provide prospective protection for groundwater, represents a result-driven theory that favors the industry without a sound evidentiary basis. I conclude the Board's decision to reject Subpart G was not only arbitrary, capricious, and unreasonable but also contrary to the legislative directive of Public Act 96-1416.

Id. ¶ 81 (internal citation omitted).

ARGUMENT

The Illinois Groundwater Protection Act serves “to restore, protect, and enhance the groundwaters of the State,” and requires that this resource “be managed to allow for maximum benefit of the people of the State of Illinois.” 415 ILCS 55/2(b) (West 2014). To advance this policy, the General Assembly required the Board under Sections 22.51 and 22.51a of the Illinois Environmental Protection Act to promulgate rules at CCDD and USF sites that would “include standards and procedures *necessary to protect groundwater.*” 415 ILCS 22.51(f)(1), 415 ILCS 22.51a(d)(1) (West 2010) (emphasis

added). By rejecting groundwater monitoring, which is a sensible and important component of groundwater protection at CCDD and USF sites, the Board failed to promulgate the standards necessary to protect groundwater at these sites. The Board's decision to reject Subpart G was arbitrary, capricious and unreasonable, and violated its statutory obligation under the Illinois Groundwater Protection Act to protect groundwater through regulatory action.

Accordingly, *amici* ELPC and CARE respectfully request that this Court reverse the Appellate Court's decision, remand the matter to the Illinois Pollution Control Board, and direct the Board to promulgate rules that include reasonable and necessary groundwater monitoring requirements at CCDD and USF fill sites.

I. THE BOARD'S DECISION TO REJECT GROUNDWATER MONITORING WAS ARBITRARY, CAPRICIOUS AND UNREASONABLE, AND THEREFORE MUST BE SET ASIDE.

The Board's decision to strike Subpart G was arbitrary, capricious and unreasonable, and therefore must be set aside. *See Greer v. Illinois Hous. Dev. Auth.*, 122 Ill. 2d 462, 496–97 (1988). An agency's decision is considered arbitrary, capricious or unreasonable if it: (a) relies on factors which the legislature did not intend for it to consider; (b) fails to consider an important aspect of the problem addressed; or (c) offers an explanation that runs counter to the evidence presented, or is so implausible that it could not be ascribed to a difference in view or a product of the agency's expertise. *Id.* at 505–06. In reaching its decision to strike Subpart G, the Board failed to consider two important and necessary factors: (1) the obvious insufficiency of relying on front-end certification and inspection procedures alone; and (2) the exponentially higher remediation costs caused by delayed detection of contamination. The Board's decision to

reject the Subpart G groundwater monitoring requirements was therefore arbitrary, capricious and unreasonable, and must be set aside.

A. The Board's Rejection of Groundwater Monitoring Erroneously Assumes Complete Effectiveness of Front-End Procedures to Prevent Contamination.

Front-end requirements designed to prevent the presence of contaminants in fill material are not fail-proof. Indeed, far from it. Actual groundwater monitoring is a common-sense and essential component of groundwater protection policy in order to detect contamination at a stage early enough to allow remediation. The Board's decision to strike Subpart G erroneously assumes 100 percent effectiveness of the front-end certification and inspection procedures, apparently viewing actual groundwater monitoring as little more than an unnecessary hoop for CCDD businesses to jump through. *See* Br. of Resp't Ill. Pollution Control Bd. at 28-29 (arguing that "detecting contamination" and "protecting groundwater" are distinct). In reality, detecting contamination through actual groundwater monitoring is essential to—not distinct from—groundwater protection. The Board's undue confidence in front-end procedures: (1) ignores specific flaws in the certification and inspection procedures, corroborated by actual evidence of contamination; and (2) contradicts standard groundwater protection policy, which recognizes that *no* front-end measures entirely guarantee against contaminant leaching.

1. Inherent flaws in the state's front-end certification and inspection procedures at CCDD pose substantial risk for groundwater contamination.

The front-end certification and inspection procedures relied upon by the Board are imperfect and do not fully protect groundwater from contamination at CCDD and USF sites. Illinois regulations limit CCDD to uncontaminated broken concrete without

protruding metal bars, bricks, rock, stone, reclaimed or other asphalt pavement, or soil generated from construction or demolition activity. *See* 35 Ill. Adm. Code 1100.103 (2012). Despite these clear requirements, however, a 2013 survey by CARE identified over 175 enforcement actions by the IEPA against CCDD generators and site owners since 2002, and 11 enforcement actions by the Illinois Attorney General since the promulgation of CCDD regulations under Part 1000. PC 73 at 1 (CARE post-hearing public comments submitted in response to June 12, 2013 Hearing Officer Order). Most recently, in May 2018, the Illinois Attorney General filed two lawsuits against the owner of two LaSalle CCDD facilities in Sheridan, Illinois, which allegedly received truckloads of debris containing wood, metal, plastic and glass mixed with soil and brick fragments. *See* Press Release, Ill. Att’y General, Attorney General Madigan Files Lawsuits Against Landfills for Construction and Demolition Debris (May 4, 2018).⁵ These frequent and recurring enforcement actions demonstrate how certification and inspection procedures too often fail to prevent the presence of contaminated materials at fill sites—including those visible to the naked eye.

Even if site owners, operators and inspectors exercise good faith efforts to comply with CCDD and USF regulations, the certification and inspection measures are still vulnerable to error. With respect to certification, the regulations require site owners or operators to obtain a certification that received soil, including soil mixed with CCDD, is uncontaminated. *See* 35 Ill. Adm. Code 1100.205(a)(1) (2012). However, source site owners are not required to hire a licensed professional engineer (LPE) or licensed professional geologist (LPG) to generate this certification—they may certify the site

⁵ Available at http://www.illinoisattorneygeneral.gov/pressroom/2018_05/20180504b.html.

themselves. *See* 35 Ill. Adm. Code 1100.205(a)(1)(A) (2012). Possibly motivated by the ease and lower cost of self-certification, the majority of source sites choose to self-certify rather than employ a licensed professional. *See* PC 74 at 6 (post-hearing public comments by the IEPA citing IAAP study, reporting self-certifications ranging from 53% to 84.5% of total soil certifications at four Illinois fill sites from 2010-12).

The “self-certification” process under Section 1100.205(a)(1)(A) requires the source site owner or operator to determine that its site is not a “potentially impacted property,” meaning a property on which contaminants may exist due to either historical or current use, or contaminants migrating from another nearby site. *See* 35 Ill. Adm. Code 1100.103 (2012). Accurately assessing the potential impact of a property is challenging and vulnerable to human error, as evidenced by the six different environmental site assessment standards offered to help owners and operators reach their determination. *See* ILL. ENVTL. PROTECTION AGENCY, CLEAN CONSTRUCTION OR DEMOLITION DEBRIS REGULATIONS (last visited June 21, 2018).⁶ The majority of source sites completing this analysis without assistance from licensed professionals should raise doubt about the accuracy of these numerous certifications. For these reasons, even with full compliance by industry – mostly by self-certification – certification procedures cannot fully guarantee that CCDD or USF fill materials are contaminant-free.

The inspection procedures designed to double-check initial certification are likewise subject to high levels of error in detecting contaminants. The load check process requires both a visual inspection and an inspection using a photoionization detector (“PID”). 35 Ill. Adm. Code 1100.205(b)(1)(A) (2012). The visual inspection only

⁶ Available at <http://epa.illinois.gov/topics/waste-management/waste-disposal/ccdd/index>.

identifies those contaminants visible to the naked eye, which invites a high degree of error. Likewise, PID analyzers are subject to limitations. PIDs are handheld instruments used to detect the concentration of volatile organic compounds (“VOCs”), as well as certain semi-volatile organic compounds and inorganic compounds. Outside conditions such as high humidity or electrical fields from nearby powerlines can affect a PID’s ability to generate reliable readings, while interferences from smoke or dust make the instrument vulnerable to false positive and negatives. *See* Keith A. Daum et al., *Data for First Responder Use of Photoionization Detectors for Vapor Chemical Constituents 5* (Nov. 2006).⁷ PIDs are also subject to human error because their accuracy depends on proper calibration based on site conditions. *Id.* at 6.

Finally, none of these front-end measures can remedy contamination that occurred prior to the enactment of these procedures. Illinois recognized CCDD and USF as separate from “waste” in 1997, but there were no rules requiring front-end inspection and testing of “clean” debris until 2005. *See* P.A. 94-272, eff. July 19, 2005. These regulations were replaced by more rigorous standards in 2010. *See* P.A. 96-1416, eff. July 30, 2010. Thus, for eight years, owners and operators deposited CCDD and USF without *any* regulations whatsoever, and they operated under weak regulations for the next five years. *Even if* current front-end certification and inspection procedures worked flawlessly, they would still fail to protect the public from contamination from uncertified and uninspected CCDD and USF deposited into the ground by operators between 1997 and 2010.

⁷ Available at <https://inldigitallibrary.inl.gov/sites/sti/sti/3589641.pdf>.

With respect to evidence of contamination, the results of IEPA's 2012 sampling study, which detected the presence of contaminants in certified and inspected CCDD/USF material, corroborate the inadequacy of current front-end certification and inspection procedures. After the IEPA adopted standards in late 2012 for maximum allowable concentrations ("MACs") of certain substances in fill materials, it conducted a random sampling of twelve CCDD sites. PC 74 at 5 (IEPA post-hearing public comments). At ten out of these twelve sites, IEPA inspectors found MAC exceedances for lead, cadmium, iron, aluminum, chromium, magnesium, manganese, and benzo(a)pyrene, in addition to unacceptable pH levels. More recently, an IEPA study in spring 2017 found that 74 out of 92 quarries using CCDD fill showed unacceptable levels of heavy metals such as arsenic, lead, mercury, atrazine, pesticides, and VOCs. John O'Connor, *AP Exclusive: 4 in 5 Illinois Debris Sites High in Toxins* (Nov. 19, 2017).⁸ As explained in Part II below, each of these substances poses a distinct risk to human health once they migrate from CCDD sites into groundwater through leaching. This is a real and serious problem that cannot be ignored and should not have been ignored by the Board's flawed regulations.

2. Since front-end procedures cannot entirely prevent contamination, effective groundwater protection policy requires monitoring to detect leaks and seepages as soon as possible.

On a broader policy level, sensible regulations for groundwater protection would take into account imperfections in front-end procedures. Despite the best efforts of regulators to devise protective front-end regulations and the measures of industry to follow them in many but far from all cases, sometimes these procedures fail.

⁸ Available at <http://www.chicagotribune.com/news/sns-bc-il--demolition-debris-toxins-20171119-story.html>.

Groundwater monitoring therefore serves as a common sense, protective back-end measure to detect as quickly as possible when contaminants leach into the groundwater. By improperly assuming 100 percent perfection from front-end inspection and certification, the Board's decision fosters unnecessary delays in detecting groundwater contamination that risks severe consequences for public health and the environment.

National trends for regulating construction and demolition ("C&D") debris landfills highlight the prudence of groundwater protection policies that recognize the reality that front-end safeguards sometimes fail. Although C&D landfills do not exist in Illinois—only CCDD fill operations—the Board's approach deviates severely from the norm for construction and demolition debris regulations. C&D landfills take regular construction and demolition debris and do not attempt to separate out "clean" debris, as in Illinois. Due to the commingling of clean and contaminated debris, most states—34 in total—require some form of protection against leaching at C&D landfills in the form of bottom liners or leachate collection systems. RISK ANALYSES FROM CONSTRUCTION AND DEMOLITION DEBRIS LANDFILLS AND RECYCLING FACILITIES, *supra* at 35. Even with liners and leachate collections systems, most states operating C&D landfills still recognize the fallibility of front-end measures. They thus require groundwater monitoring in the event that the liners or collection systems do not work well, because of the contamination risks and consequences of failure. *Id.* at 36. Illinois' policy deviates from the majority of states by placing full reliance on front-end procedures—certification and inspection of "clean" debris—without implementing back-end monitoring to identify contamination in groundwater sooner rather than later.

B. The Board's Rejection of Monitoring Fails to Consider the Exponentially Higher Public Health Harms and Remediation Costs Created by Delays in Detection.

The Board's decision to reject Subpart G also misconstrues the true costs of foregoing groundwater monitoring at CCDD and USF sites. The Board's final decision did not address the costs of installing and operating the groundwater monitoring system, but its earlier order dated February 2, 2012 affirmed that it did not find groundwater monitoring justified at the time "considering the potentially sizeable costs." R. 1011, citing Board Opinion and Order (Feb. 2, 2012). Ignorance is not bliss in the context of groundwater contamination, and delayed detection exponentially raises the costs of remediation due to both: (1) public health consequences; and (2) liability disputes.

1. The Board's decision fails to consider the exponentially higher public health consequences caused by delayed detection of groundwater contamination.

The Board's decision to reject Subpart G is shortsighted and "penny wise and pound foolish" with respect to the true costs of groundwater monitoring and protection. The Board considered the site operators' compliance costs and resulting effects on the CCDD industry, but neglected the fact that operators could recover part of these costs by increasing charges levied on the quantity of CCDD debris disposed of at the site, known as "tipping fees." PC 74 at 8-9 (IEPA post-hearing comments). Despite its concerns about raising costs for the CCDD industry, the Board failed to consider the even greater costs of real health harms to the public and local community if drinking water contamination occurs, as well as the economic benefits of preventing such contamination through groundwater monitoring.

Foregoing groundwater monitoring creates unnecessary delays in detection and prevents discovery of contamination until it reaches a public health crisis. The

contaminants identified by the IEPA at Illinois CCDD sites pose legitimate risks to public health, especially considering that 71% of the Will County community relies on groundwater for drinking water. Sampling conducted by the IEPA in spring 2017 showed that of 92 unlined quarries receiving CCDD fill material, 74 violated the MACs for heavy metals such as arsenic, lead and mercury as well as for volatile organic compounds. O'Connor, *supra*. These contaminants pose real health problems once they reach drinking water supplies.

i. Arsenic

Arsenic is linked to multiple forms of cancer in humans and is associated with non-cancer health effects of the skin and the nervous system. *See, e.g.*, U.S. ENVTL. PROTECTION AGENCY, INTEGRATED RISK INFORMATION SYSTEM: ARSENIC, INORGANIC (last visited June 20, 2018)⁹; U.S. AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, PUBLIC HEALTH STATEMENT FOR ARSENIC 8–11 (2007).¹⁰ Groundwater that exceeds Illinois groundwater quality standards (“GQSs”) for arsenic is highly toxic. Because of its toxicity, the state’s maximum allowable concentration of arsenic in potable resource groundwater (denoted as Class I GQS) is miniscule: .010 mg/L. 35 Ill. Adm. Code 620.410 (2012).

ii. Lead

Lead is a neurotoxin and associated with effects on childhood neurobehavioral development—even at very low doses—and is classified by the USEPA as a “probable human carcinogen.” U.S. ENVTL. PROTECTION AGENCY, INTEGRATED RISK INFORMATION

⁹ Available at https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0278_summary.pdf.

¹⁰ Available at <https://www.atsdr.cdc.gov/PHS/PHS.asp?id=18&tid=3>.

contaminants identified by the IEPA at Illinois CCDD sites pose legitimate risks to public health, especially considering that 71% of the Will County community relies on groundwater for drinking water. Sampling conducted by the IEPA in spring 2017 showed that of 92 unlined quarries receiving CCDD fill material, 74 violated the MACs for heavy metals such as arsenic, lead and mercury as well as for volatile organic compounds. O'Connor, *supra*. These contaminants pose real health problems once they reach drinking water supplies.

i. Arsenic

Arsenic is linked to multiple forms of cancer in humans and is associated with non-cancer health effects of the skin and the nervous system. *See, e.g.*, U.S. ENVTL. PROTECTION AGENCY, INTEGRATED RISK INFORMATION SYSTEM: ARSENIC, INORGANIC (last visited June 20, 2018)⁹; U.S. AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, PUBLIC HEALTH STATEMENT FOR ARSENIC 8–11 (2007).¹⁰ Groundwater that exceeds Illinois groundwater quality standards (“GQSs”) for arsenic is highly toxic. Because of its toxicity, the state’s maximum allowable concentration of arsenic in potable resource groundwater (denoted as Class I GQS) is miniscule: .010 mg/L. 35 Ill. Adm. Code 620.410 (2012).

ii. Lead

Lead is a neurotoxin and associated with effects on childhood neurobehavioral development—even at very low doses—and is classified by the USEPA as a “probable human carcinogen.” U.S. ENVTL. PROTECTION AGENCY, INTEGRATED RISK INFORMATION

⁹ Available at https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0278_summary.pdf.

¹⁰ Available at <https://www.atsdr.cdc.gov/PHS/PHS.asp?id=18&tid=3>.

SYSTEM: LEAD AND COMPOUNDS 7 (last visited June 20, 2018).¹¹ The USEPA Action Level for lead in drinking water is zero mg/L, indicating that there may be no “safe” threshold for lead toxicity. U.S. ENVTL. PROTECTION AGENCY, 2018 EDITION OF THE DRINKING WATER STANDARDS AND HEALTH ADVISORIES 8 (2018).¹² Groundwater concentrations of lead above the Illinois Class I GQS, 0.0075 mg/L, are thus unsafe to drink. See 35 Ill. Adm. Code 620.410 (2012).

iii. Mercury

Mercury is classified by USEPA as a neurotoxin. U.S. ENVTL. PROTECTION AGENCY, HEALTH EFFECTS OF EXPOSURES TO MERCURY (2018).¹³ Mercury harms fetal brain development, is toxic to the kidneys and is associated with respiratory and neurological impairment. The Illinois Class I GQS for mercury is 0.002 mg/L. 35 Ill. Adm. Code 620.410 (2012).

iv. Volatile Organic Compounds

VOCs are organic compounds characterized by their ability to move between water and air due to their high vapor pressure at room temperature, low-to-medium water solubility, and low molecular weight. John S. Zogorski et al., *The Quality of Our Nation's Waters: Volatile Organic Compounds in the Nation's Ground Water and Drinking-Water Supply Wells*, U.S. GEOLOGICAL SURVEY 8 (April 2006).¹⁴ These compounds often evaporate or break down in surface water, but can linger in groundwater for years and travel long distances from their initial source. *Id.* VOCs

¹¹ Available at https://cfpub.epa.gov/ncea/iris/iris_documents/documents/subst/0277_summary.pdf.

¹² Available at <https://www.epa.gov/sites/production/files/2018-03/documents/dwtable2018.pdf>.

¹³ Available at <https://www.epa.gov/mercury/health-effects-exposures-mercury>.

¹⁴ Available at https://pubs.usgs.gov/circ/circ1292/pdf/circ1292_chapter2.pdf.

include both human-made and naturally occurring chemical substances and continue to have widespread usage in homes, businesses, and industry in the form of wood products, cleaning materials, paints and carpets. *Id.* at 9. Concentrations of certain VOCs in drinking water pose carcinogenic risks and may harm nervous, circulatory, reproductive, and respiratory system functions. As a result, USEPA has established maximum contaminant levels (“MCLs”) in drinking water for 29 VOCs.

The recent crises in Flint, Michigan and Galesburg, Illinois tragically make clear the consequences of ignoring the possibility of drinking water contamination. In Flint, city officials switched the town’s drinking water as a cost-saving maneuver at the expense of residents poisoned by lead contamination. Characterized as “penny wise and pound foolish,” the city’s maneuver hoped to save approximately \$5 million and ultimately cost it 80-fold greater. P. Muennig, *The Social Costs of Lead Poisonings* HEALTH AFFAIRS (August 2016).¹⁵ The costs of a public health crisis include residents’ medical fees and damage to the city’s economy because of sick citizens, and are thus part of the price paid for delayed discovery of contamination. A similar but less-publicized situation unfolded in Galesburg, Illinois in 2016, where city officials downplayed decades-long lead exceedances—1.5 times the federal standard—in the community’s water supplies. NBC CHICAGO, *Test in Illinois Town Show Lead Problem Extends Beyond Flint*, (April 9, 2016).¹⁶ Years ago, in an effort to cut costs, the city abandoned a program that would have assisted homeowners in replacing their aging lead service lines commonly installed in homes built before the mid-1980s. These service pipes were later

¹⁵ Available at <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2016.0661>.

¹⁶ Available at <https://www.nbcchicago.com/news/local/Tests-in-Illinois-Town-Show-Lead-Problem-Extends-Beyond-Flint-375136321.html>.

identified as a major source of the lead contamination. The Board's decision to reject groundwater monitoring sets the stage for a situation in Will County akin to those in Flint and Galesburg: a shortsighted groundwater management policy conceived out of a desire to cut costs, forcing reactive response after a public health crisis has erupted as opposed to sensible, proactive protection.

2. The Board's decision to remove monitoring requirements raises remediation costs by allowing responsible parties to escape liability.

By rejecting groundwater monitoring requirements that would detect contamination at the source, the Board's decision creates a regulatory framework that burdens Illinois taxpayers and business owners with the costs of remediation instead of the responsible parties. Contamination in groundwater is capable of migrating far from the original source. For example, the chemical structure of VOCs allows these contaminants to persist and accumulate in groundwater over long periods of time, and travel long distances from where they initially leached into the water supplies. ILLINOIS GROUNDWATER PROTECTION PROGRAM at 11. The farther away from the source that a contaminant migrates, the more uncertainty for the question of causation: Who caused the contamination? This uncertainty plays out through long, costly proceedings before courts and administrative agencies to determine responsibility and liability for groundwater contamination. *See, e.g., Sierra Club et al. v. Midwest Generation, LLC*, No. PCB 2013-015 (Ill. Pollution Control Bd. 2018) (action by Environmental Law & Policy Center, CARE, Sierra Club, and co-plaintiffs against coal plant operator Midwest Generation for groundwater contamination liability); *People of the State of Illinois v. Michel Grain Company, Inc.*, No. PCB 96-143 (Ill. Pollution Control Bd. 1996) (cost recovery action related to liability for groundwater contamination); *Emerson Elec. Co. v. Aetna Cas. &*

Sur. Co., 319 Ill. App. 3d 218 (2001) (holding that contamination of aquifer from continuous exposure established “occurrence” but not causative event). The lengthy causation and liability disputes in these proceedings illustrate how delays in discovering contamination obstruct the processes of identifying responsible parties and beginning the remediation stage. In the context of groundwater contamination, monitoring at CCDD sites detects pollution early at its source and thereby prevents responsible parties from evading liability.

To magnify the challenge of tracing contamination back to them, the CCDD industry has refused to conduct any baseline testing on-site to confirm present-day water quality. *See* PC 73 at 7 (CARE post-hearing comments). Despite eight years of owners and operators disposing of CCDD without *any* regulations whatsoever and a subsequent five years of weak regulations, the CCDD industry never presented the Board with proof that groundwater under these sites is clean. As the dissent in the court below observed, the industry’s wariness against simply testing the waters below these sites suggests a lack of confidence that the groundwater remains truly free of contamination. Without baseline testing, any contamination that shows up in end-point drinking water supplies cannot be definitively traced back to the original source in some cases.

The Board’s rejection of Subpart G creates a regulatory framework that prevents identification of groundwater contamination at the source, thereby allowing CCDD site owners and operators to deny liability once contamination is discovered. This policy of ignorance runs counter to the intent of the Illinois Groundwater Protection Act that charged the Board with promulgating requirements that would actually protect *groundwater*—not the CCDD industry. As a common sense principle of environmental

law, allowing polluters to eschew liability shifts the costs of remediation and clean-up onto taxpayers instead of the responsible party. Consequently, the Board's decision raises costs and shifts the costs from CCDD operators onto the public.

II. THE BOARD'S DECISION TO REJECT GROUNDWATER MONITORING REQUIRES ILLINOIS CITIZENS TO ENFORCE THEIR RIGHTS TO CLEAN GROUNDWATER UNDER ARTICLE XI OF THE ILLINOIS CONSTITUTION, CONTRARY TO THE INTENT OF PUBLIC ACT 96-1416.

If this Court declines to set aside the Board's decision to strike groundwater monitoring policies, Illinois citizens will be left to enforce their constitutional right to a healthy environment – here, safe and clean groundwater drinking supplies – under Article XI of the Illinois Constitution. Here, the General Assembly intended to protect the state's groundwater resources through comprehensive regulatory action, but the Board failed to follow through on its statutory obligations.

Without effective full groundwater protection regulations in place, Illinois citizens can enforce their constitutional right to clean groundwater through litigation under Article XI. The Illinois Constitution guarantees every citizen the “right to a healthful environment” and provides standing for individuals to enforce this right through legal action. ILL. CONST. 1970, art. XI, § 2. This Court recognizes that “healthful environment” under the Illinois Constitution “was intended to refer to the relationship between the environment and human health.” *Glisson v. City of Marion*, 188 Ill. 2d 211, 225 (1999). In particular, “the primary concern of the drafters of Article XI was the *effect of pollution* on the environment and human health.” *Id.* (emphasis added). In drafting this article, the General Government Committee intended to ensure that Illinois citizens would “not be denied the opportunity to seek relief when so fundamental a right

as that to a healthful environment is involved.” 6 Record of Proceedings, Sixth Illinois Constitutional Convention 693, 702.

Article XI provides standing to individuals so that they may seek relief when their right to a healthful environment is threatened. The dire human and environmental consequences of contaminated groundwater, which may travel into drinking water supplies in wells or surface water bodies such as lakes and streams, fit squarely within the scope of this right. Consequently, Article XI provides the basis for individuals to bring citizen actions upon the discovery of contaminated groundwater.

Avoiding the groundwater contamination and preserving a healthful environment in the first instance is preferable to citizen enforcement and remediation *after* drinking water has become contaminated. The General Assembly amended the Illinois Environmental Protection Act through Public Act 96-1416 with this prevention purpose in mind: comprehensive regulatory action to protect the state’s groundwater resources. *See* P.A. 96-1416, eff. July 30, 2010. Under Sections 22.51 and 22.51a, the General Assembly mandated that the Board promulgate rules at CCDD and USF “necessary to protect groundwater.” 415 ILCS 22.51(f)(1); 415 ILCS 22.51a(d)(1) (West 2010). Through this statutory mandate, the Legislature expected the Board to promulgate rules that would comprehensively protect groundwater. Instead, the Board rejected sensible groundwater monitoring—a necessary component of groundwater protection policy at CCDD and USF sites. As a result, by failing to protect groundwater through regulatory action as the General Assembly had intended, the Board implicitly forces the issue of groundwater contamination into necessary citizen lawsuits under Article XI of the Constitution. The preferred course is for the Board to adopt more effective groundwater

protection standards – including sensible groundwater monitoring requirements – as was intended by the General Assembly in enacting the Illinois Groundwater Protection Act and amending the Illinois Environmental Protection Act.

CONCLUSION

For the reasons stated above, the Board's decision to strike Subpart G was arbitrary, capricious and an abuse of discretion. Accordingly, *amici* ELPC and CARE respectfully request that this Court reverse the Illinois Appellate Court's decision, remand the matter to the Illinois Pollution Control Board, and direct the Board to promulgate rules that include groundwater monitoring requirements at CCDD and USF fill sites.

Dated: July 5, 2018

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

I certify that this brief conforms to the requirements of Rules 341(a) and (b). The length of this brief, excluding the pages or words contained in the Rule 341(d) cover, the Rule 341(h)(1) statement of points and authorities, the Rule 341(c) certificate of compliance, the certificate of service, and those matters to be appended to the brief under Rule 342(a), is 5,838 words.

Dated: July 5, 2018

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SUPREME COURT CLERK

to such matters the undersigned certifies as aforesaid that he verily believes the same to be true.

Dated: July 5, 2018

/s/ Howard A. Learner
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