

Illinois Official Reports

Supreme Court

County of Will v. Pollution Control Board, 2019 IL 122798

Caption in Supreme Court: THE COUNTY OF WILL *et al.*, Appellants, v. THE POLLUTION CONTROL BOARD, Appellee.

Docket Nos. 122798, 122813 cons.

Filed June 20, 2019

Decision Under Review Appeal from the Appellate Court for the Third District; heard in that court on review of order of Pollution Control Board.

Judgment Appellate court judgment affirmed.
Board decision affirmed.

Counsel on Appeal James W. Glasgow, State's Attorney, of Joliet (Marie Quinlivan Czech, Assistant State's Attorney, of counsel), for appellants County of Will and Will County Land Use Department.

Kwame Raoul, Attorney General, of Springfield (David L. Franklin, Solicitor General, and Carl J. Elitz, Assistant Attorney General, of Chicago, of counsel), for the People.

Marie E. Tipsord and J. Mark Powell, Special Assistant Attorneys General, of Chicago, for appellee Illinois Pollution Control Board.

Howard A. Learner and Andrene E. Dabaghi, of Chicago, for *amici curiae* Environmental Law & Policy Center *et al.*

Claire A. Manning and Daniel L. Hamilton, of Brown, Hay & Stephens, LLP, of Springfield, for *amicus curiae* Illinois Clean Construction and Demolition Debris (CCDD) Coalition.

Justices JUSTICE THEIS delivered the judgment of the court, with opinion.
Chief Justice Karmeier and Justices Thomas, Garman, and Neville concurred in the judgment and opinion.
Justice Kilbride dissented, with opinion.
Justice Burke took no part in the decision.

OPINION

¶ 1 In 2010, the Illinois General Assembly directed the Pollution Control Board (Board) to adopt “rules for the use of clean construction or demolition debris [(CCDD)] and uncontaminated soil [(US)] as fill material at clean construction or demolition debris fill operations.” Pub. Act 96-1416 (eff. July 30, 2010). The legislature added that the rules must include “standards and procedures necessary to protect groundwater” and provided an inexhaustive list of 12 ways to do so that the Board may consider. *Id.* One of those ways was groundwater monitoring. *Id.* The rules ultimately promulgated by the Board required stronger “front-end” testing and certification requirements for CCDD and US but not a “back-end” groundwater monitoring requirement.

¶ 2 The sole issue in this appeal is whether the Board’s decision was arbitrary and capricious. The appellate court concluded that it was not and affirmed the Board’s decision. 2017 IL App (3d) 150637-U. For the reasons that follow, we affirm the appellate court’s judgment.

BACKGROUND

¶ 3 Construction and demolition projects produce materials that must be removed and discarded. In 1997, the General Assembly amended Illinois’s Environmental Protection Act (Act) (415 ILCS 5/1 *et seq.*) to distinguish between general materials and clean materials. See Pub. Act 90-475 (eff. Aug. 17, 1997). The amendment defined general materials or “general construction or demolition debris” (GCDD) as

“non-hazardous, uncontaminated materials resulting from the construction, remodeling, repair, and demolition of utilities, structures, and roads, limited to the following: bricks, concrete, and other masonry materials; soil; rock; wood, including non-hazardous painted, treated, and coated wood and wood products; wall coverings; plaster; drywall; plumbing fixtures; non-asbestos insulation; roofing shingles and other roof coverings; reclaimed asphalt pavement; glass; plastics that are not sealed in a

manner that conceals waste; electrical wiring and components containing no hazardous substances; and piping or metals incidental to any of those materials.” 415 ILCS 5/3.78 (West 1998) (now codified at 415 ILCS 5/3.160(a) (West 2016)).

¶ 5 The amendment defined clean materials, or “clean construction or demolition debris” (CCDD), much more simply as “uncontaminated broken concrete without protruding metal bars, bricks, rock, stone, reclaimed asphalt pavement or soil generated from construction or demolition activities.” 415 ILCS 5/3.78a (West 1998) (now codified at 415 ILCS 5/3.160(b) (West 2016)). Under the Act, CCDD is not considered waste, to the extent allowed by federal law,

“if it is *** used as fill material outside of a setback zone[, and] if the fill is placed no higher than the highest point of elevation existing prior to the filling immediately adjacent to the fill area, and if covered by sufficient uncontaminated soil to support vegetation within 30 days of the completion of filling or if covered by a road or structure, and, if used as fill material in a current or former quarry, mine, or other excavation, is used in accordance with the requirements of Section 22.51 of this Act and the rules adopted thereunder.” 415 ILCS 5/3.160(b)(i) (West 2016).

Accordingly, sites that accept CCDD did not have to comply with costly regulatory requirements applicable to landfills that accept GCDD.

¶ 6 The following year, the General Assembly recognized that there were effectively no rules to prevent CCDD fill site operators from accepting GCDD and commingling general and clean materials. The legislature consequently amended the Act to prohibit the generation, transportation, or recycling of CCDD without documentation of its weight or volume, its origin, its hauler, and its destination. 415 ILCS 5/21(w) (West 2000). The legislature did not require operators to screen loads coming into their sites.

¶ 7 In 2005, the General Assembly closed that gap. The legislature amended the Act to require CCDD fill site operators to obtain permits from Illinois’s Environmental Protection Agency (Agency). 415 ILCS 5/22.51(b) (West 2006). That amendment also instructed the Agency to propose and the Board to adopt regulations for the use of CCDD as fill material in current and former quarries, mines, and other excavations. *Id.* § 22.51(c). The legislature wanted those regulations to include “standards for [CCDD] fill operations and the submission and review of permits.” *Id.* The Board soon promulgated such regulations as part 1100 of title 35 of the Illinois Administrative Code. See 35 Ill. Adm. Code 1100 (2012). Under part 1100, operators were required to screen loads and reject material that did not meet the statutory definition of CCDD.

¶ 8 In 2010, the General Assembly revisited the subject of CCDD. The legislature amended the Act to define uncontaminated soil (US) as soil from construction projects that does not contain contaminants harmful to human health or the environment. 415 ILCS 5/3.160(c)(1) (West 2010). Like CCDD, US is not considered “waste” to the extent allowed under federal law and regulations. *Id.* The amendment required fill site operators to obtain either a certification from the generator that the soil was “never *** used for commercial or industrial purposes and is presumed to be uncontaminated” or a certification from a licensed engineer that the soil is uncontaminated. *Id.* § 22.51(f)(2)(B). The amendment also required operators to confirm that the CCDD or US was not removed from a site “as part of a cleanup or removal of contaminants.” *Id.* § 22.51(f)(2)(C).

¶ 9 Additionally, the legislature for the first time voiced a concern about protecting groundwater and added sections 22.51(f)(1) and 22.51a(d)(1) to the Act. Section 22.51(f)(1) provided:

“[T]he [Agency] shall propose to the [Board], and *** the Board shall adopt, rules for the use of [CCDD] and [US] as fill material at [CCDD] fill operations. The rules must include standards and procedures necessary to protect groundwater, which may include, but shall not be limited to, the following: requirements regarding testing and certification of soil used as fill material, surface water runoff, liners or other protective barriers, monitoring (including, but not limited to, groundwater monitoring), corrective action, recordkeeping, reporting, closure and post-closure care, financial assurance, post-closure land use controls, location standards, and the modification of existing permits to conform to the requirements of this Act and Board rules. The rules may also include limits on the use of recyclable concrete and asphalt as fill material at [CCDD] fill operations, taking into account factors such as technical feasibility, economic reasonableness, and the availability of markets for such materials.” *Id.* § 22.51(f)(1).

Section 22.51a(d)(1) provided:

“[T]he Agency shall propose to the Board, and *** the Board shall adopt, rules for the use of [US] as fill material at [US] fill operations. The rules must include standards and procedures necessary to protect groundwater, which shall include, but shall not be limited to, testing and certification of soil used as fill material and requirements for recordkeeping.” *Id.* § 22.51a(d)(1).

¶ 10

The Agency’s Proposal

¶ 11 The Agency went to work. In February 2011, the Agency published an overview of draft regulations and solicited input on them from “a diverse set of stakeholder groups.” According to the Agency, it received 88 pages of comments from 24 stakeholder groups in the public and private sector. On April 29, 2011, the Agency published an overview of revised draft regulations and requested further feedback from stakeholders. Three months later, on July 29, 2011, the Agency filed its proposed regulations with the Board. The proposal contained eight subparts, labeled A through G. Subpart A contained general provisions, including revised and new definitions for terms used in part 1100. Subpart B concerned standards for CCDD at fill operations. Subpart C concerned permit application information for CCDD fill operations. Subpart D concerned procedural requirements for permitting CCDD fill operations. Subpart E concerned US fill operations. Subpart F concerned standards for US at fill operations. And subpart G concerned groundwater monitoring.

¶ 12 Subpart G required owners and operators of permitted CCDD and US fill sites to install groundwater monitoring systems—essentially, wells—and to collect water samples annually. Those samples could not exceed the groundwater quality standards listed in part 1100. See 35 Ill. Adm. Code 620.410 (2012). In the event of an exceedance, an owner or operator would be required to notify the Agency, to prepare a remediation plan, and to implement and continue that plan until the fill site had no violations for three years. Subpart G applied for the “active life” of a fill site but exempted shuttered sites and sites undergoing “dewatering,” a process for removing excess water.

¶ 13 In its “STATEMENT OF REASONS” supporting its proposal, the Agency stated that its outreach efforts resolved significant concerns raised by interested parties. However, the Agency further stated that disagreements with its proposal remained. One area of disagreement was groundwater monitoring. On that subject, the Agency noted,

“Several parties oppose the groundwater monitoring requirements of proposed Subpart G of Part 1100. In their comments to [the Agency] they assert that the load checking requirements of Subpart B *** are sufficiently protective of groundwater and that the [Agency’s] proposed groundwater monitoring program will force many fill operations to shut down due to the high cost of installing and sampling monitoring wells.”

¶ 14 The Agency acknowledged that its proposal would increase costs for fill site operators but asserted that “the extent of the cost increase is unknown and may vary significantly between fill operations.” The Agency insisted that it tried to mitigate those costs and felt they were outweighed by the benefits of groundwater monitoring. Because the Agency “cannot be sure that the front-end screening process will keep 100% of contamination out of the fill operations, the groundwater monitoring requirement is necessary to detect any contamination of groundwater and provide timely corrective action and remediation.” Additionally, the Agency believed that “a groundwater monitoring program is important at fill operations because the facilities are not required to have a protective liner to control contaminant migration and because they are consolidating a large volume of offsite materials into one area with that material often placed directly into the groundwater flow.”

¶ 15

The Board’s Base Docket Proceedings

¶ 16 The Board docketed the proposed regulations and held two hearings on them in late 2011. At the first hearing, the Agency presented testimony in support of its proposed regulations from Stephen Nightengale, manager of the Agency’s bureau of land permit section; Paul Purseglove, manager of the Agency’s bureau of land field operations section; Douglas Clay, manager of the Agency’s division of land pollution control; and Leslie Morrow, an Agency environmental toxicologist. At the second hearing, the Agency presented additional testimony from Nightengale and Thomas Hornshaw, manager of the Agency’s toxicity assessment unit. Eleven other public and private sector witnesses testified. The Board also received 20 written comments from various individuals, business entities, advocacy groups, and public bodies, including the Agency and the State of Illinois, as well as an official at the resource recovery division of the Will County Land Use Department.

¶ 17

The Board’s First Order

¶ 18 On February 2, 2012, the Board issued a 116-page, first-notice opinion and order. The Board stated that it had reviewed the record and then summarized the testimony and comments in meticulous detail. Regarding subpart G and the proposed groundwater monitoring requirement, the Board noted a lack of unanimity on that issue. The Board found:

“[T]he record does not include evidence to demonstrate that CCDD or [US] sites are a source of groundwater contamination. Further, the record indicates requiring groundwater monitoring would impose potentially sizeable costs that may have adverse impacts on the fill operation. CCDD and uncontaminated soils are not classified as

wastes, so do not require the stringent rules that exist for nonhazardous waste landfills. Therefore, *** the record does not support groundwater monitoring at this time.”

¶ 19 The Board was “disturbed” by the inconsistency between the Agency’s assertion that the costs of groundwater monitoring are unknown and its assurance that the fiscal impact of such a program would not be detrimental. Section 27 of the Act requires consideration of the economic reasonableness of any regulations. The Board concluded that groundwater monitoring is not economically reasonable because evidence indicated that monitoring is “costly and could potentially result in businesses closing.”

¶ 20 As detailed above, the Board noted that “the record does not include evidence to demonstrate that CCDD or [US] sites are a source of groundwater contamination,” and CCDD and US “are not classified as wastes, so do not require the stringent rules that exist for nonhazardous waste landfills.” The Board turned to the Act, which required the Board’s rules to include “standards and procedures necessary to protect groundwater.” According to the Board, the legislature listed 12 possible methods of doing so; one of those was groundwater monitoring. The Board surmised that “while groundwater protection is a legislative priority, this protection can be achieved without requiring groundwater monitoring.” The Board decided to strengthen “front-end” procedures, by requiring soil testing and certification by a licensed professional engineer or geologist whenever the source of CCDD or US is a “potentially impacted property” where the materials are more likely to be contaminated, but to delete subpart G of the Agency’s proposal.

¶ 21 During the first notice period, the Board held another hearing in early 2012. At that hearing, the Agency presented testimony from Clay and Richard Cobb, a licensed professional geologist and the Agency’s deputy manager of its bureau of water division of public water supplies. Thirteen other public and private sector witnesses testified. And the Board received written comments from 27 individuals, business entities, advocacy groups, and public bodies, again including the Agency, the State, and the Will County Land Use Department.

¶ 22

The Board’s Second Order

¶ 23 On June 7, 2012, the Board issued a 130-page, second-notice opinion and order. As it did in its first order, the Board stated that it had reviewed the record and then detailed the testimony and comments. The Board identified and discussed a number of issues that the participants raised, including groundwater monitoring. In that regard, the Board reiterated, “The Act does not require groundwater monitoring, but only that groundwater be protected.” The Board highlighted the options provided by the legislature for protecting groundwater and stated that its rules addressed several of those options—“testing and certification of soils to be deposited in CCDD and [US] fill operations, surface water control, recordkeeping and reporting, and closure and postclosure care.” The Board returned to the requirement of soil testing. If the source of materials is such a potentially impacted property, then “testing must be done” so materials do not exceed maximum allowable concentrations (MACs) of contaminants. The Board explained:

“If [materials] exceed the MACs[, they] are not ‘uncontaminated’ and cannot be used as fill in a CCDD or [US] fill operation. Thus, the Board’s rules prohibit using [materials] that are contaminated as fill material ***. As the rules do not allow for

contaminated material to be placed in a fill operation, the Board is unconvinced that groundwater monitoring is required.”

¶ 24 The Board also engaged the State’s argument that CCDD and US are waste and should be regulated in the same manner as other materials that pose a risk to the public. The Board quoted section 3.160(b) of the Act, which states that, to the extent allowed by federal law, CCDD “shall not be considered ‘waste’ ” under certain circumstances. The Board rejected the State’s position:

“The Board is unconvinced by the [State’s] argument that CCDD and [US] as defined by Section 3.160(b) of the Act are always waste. Federal law has no rule or statute directly on point. The [State] would have the Board search federal law to find federal language that specifically provides that CCDD and [US] are not waste. The Board instead will rely on the plain language of the statute in which the Illinois General Assembly found that CCDD and [US] used as fill material are not a waste. The Board will not usurp the General Assembly without specific evidence that federal law will be circumvented.”

¶ 25 The Board noted that the record lacked any evidence that fill sites “operating within the law are currently contaminating wells or are likely to contaminate the wells.” Although the Agency and the State insisted that such evidence is not required before implementing groundwater monitoring, the Board believed that “something more is required in this case where the record merely reflects that groundwater contamination is possible if the rules are not followed.” The Board remained unconvinced because the evidence adduced at the second hearing had not “added sufficient information to change the Board’s position.” Several participants, including the Agency, provided conflicting information on the costs of groundwater monitoring. The Board reviewed that evidence and concluded, “in view of the Board’s decision that soil certification and testing sufficiently protects groundwater, the costs information does not alter the Board finding.” The Board ultimately refused to restore subpart G to its regulations.

¶ 26 The Board sent its proposed regulations to the legislature’s Joint Committee on Administrative Rules (JCAR). On August 22, 2012, JCAR certified that it had considered the Board’s order and did not object to the Board’s regulations. JCAR offered 25 stylistic changes to the regulations and, more importantly, recommended that the Board revisit the issue of groundwater testing. According to JCAR, “[t]his would give the Board the opportunity to receive further comment from parties who may not have submitted their supportive views when groundwater monitoring was an element of this proposal and who may have opinions and information to offer in light of the Board’s decision to remove that requirement before going to 1st Notice on this rulemaking.” The next day, the Board adopted the regulations with the nonsubstantive changes suggested by JCAR and opened subdocket B “to continue to examine the issue of groundwater monitoring at CCDD or [US] fill operation[s].”

¶ 27 The Board’s Subdocket Proceedings

¶ 28 The Board solicited public comments regarding groundwater monitoring. Eighteen public and private sector entities and individuals responded, including the Agency, the State, Will County State’s Attorney James Glasgow, two state senators, and four state representatives, all of whom requested that the Board include groundwater monitoring in its final decision. The

Agency agreed with the Board’s conclusion that the Act did not specifically require groundwater monitoring but emphasized that such monitoring is “the single most important measure for achieving groundwater protection.” According to the Agency, certification and screening procedures were of limited effectiveness; “they could provide a basic level of protection but could not be relied upon to provide a consistently high level of protection by all soil generators at all fill operations for all potential contaminants and all soil accepted at fill operations over an indefinitely long period of time.” The Agency added that “groundwater monitoring was an important ‘back-end’ control that would serve as an early warning of any groundwater contamination that might result from the quantities of soil deposited in unlined quarries, mines or other excavations.”

¶ 29 After reviewing those comments, the Board held another hearing, where individuals and representatives of some entities that filed comments testified. At the close of the hearing, the Board’s hearing officer set forth a series of questions raised by the testimony and opened an additional comment period. Fill industry groups and public bodies—namely, the Agency, the State, and Will County—answered those questions.

¶ 30 The Board’s Third Order

¶ 31 On August 6, 2015, the Board issued a 66-page order, stating that it “remains unconvinced that groundwater monitoring for permitted CCDD and [US] fill[] sites is required for the protection of groundwater.” In fact, the Board found that the subdocket proceedings provided additional support for its earlier decision to reject subpart G. The Board repeated its earlier finding that CCDD and US used as fill material in accordance with section 22.51 of the Act are not waste. The Board rejected the State’s argument that CCDD and US have characteristics similar to waste disposed in landfills so that those materials should be considered “inert waste.” The Board stated its position:

“The Board notes that the record indicates some confusion may still exist with regard to CCDD and [US] that is placed in permitted facilities regulated under Part 1100 and material that are considered ‘waste.’ The Board notes that several commenters referred to CCDD and [US] as ‘waste’ in their comments. The Board disagrees with this reference. *** This distinction was made by the General Assembly in deciding to allow CCDD and [US] facilities to operate under the statute and the Board rules implementing the statute. Therefore, the Board cannot treat CCDD and [US], regulated under Part 1100, as waste.

In addition to this confusion in the record, the [State] reiterate[s] arguments that CCDD and [US] fill operations regulated under Part 1100 will include materials that have characteristics similar to waste disposed of in inert landfills ***. The Board remains unconvinced that CCDD and [US] regulated under Part 1100 should be regulated as if the materials are inert waste. As stated above CCDD and [US] regulated under Part 1100 are not waste, and the General Assembly made that clear. *** The General Assembly did not intend CCDD that is regulated under Section 22.51 to be treated as waste, even inert waste.”

¶ 32 The Board then addressed sites exempt from part 1100, so-called “borrow pits.” Borrow pits are sites associated with public road construction projects that use CCDD or US as fill in compliance with Illinois’s Department of Transportation (IDOT) regulations. IDOT

determines whether CCDD and US are “clean” by using procedures that are similar to those in part 1100; those procedures do not include groundwater monitoring. The Board noted that CCDD and US fill sites have stricter requirements than borrow pits. The Board rejected arguments that those requirements would fail. The Board remained unconvinced that groundwater monitoring is required to protect groundwater and closed the subdocket. The State and Will County appealed from the Board’s decision. See Ill. S. Ct. R. 335 (eff. July 1, 2017); 415 ILCS 5/29(a), 41(a) (West 2016).

¶ 33 A split panel of the appellate court confirmed the Board’s decision. 2017 IL App (3d) 150637-U. The appellate court majority observed that the Board employs its expertise in promulgating regulations. *Id.* ¶ 52. Consequently, a reviewing court will invalidate such regulations only when an objecting party demonstrates that they are arbitrary, capricious, or unreasonable. *Id.* The appellate court majority addressed three arguments from the State and Will County.

¶ 34 The State and Will County first argued that the Board’s decision not to adopt subpart G and its groundwater monitoring requirement was arbitrary because the Board considered a factor that the legislature did not intend it to consider—namely, whether CCDD and US constitute “waste” under the Act. The appellate court majority rejected that argument. The majority referred to sections 22.51(f)(1) and 22.51a(d)(1) of the Act, which directed the Board to adopt rules that would protect groundwater at CCDD and US fill sites. *Id.* ¶ 60. Because the State equated subpart G to inert waste landfill regulations, the Board had to consider whether those materials should be treated as waste or inert waste. *Id.* ¶ 62. “Whether CCDD and [US] constitute ‘waste’ or ‘inert waste’ is relevant to determining what prospective regulations are necessary to protect groundwater ***.” *Id.* ¶ 61. The Board could not decide which rules are necessary without determining whether those materials are waste. *Id.*

¶ 35 The State and Will County next argued that the Board’s decision was arbitrary because the Board failed to consider important aspects of the problem targeted by the legislature—namely, the dangers posed by preregulation materials deposited at fill sites, fill site operators’ history of “scofflaw” behavior, and the cost of groundwater monitoring. The appellate court majority rejected that argument. According to the majority, “[t]he Board considered operators’ past practices; it simply did not attribute as much weight to this issue as the [State] and Will County would have liked.” *Id.* ¶ 66. The record further indicated that the Board thoroughly investigated site operators’ costs. *Id.* ¶ 68. The majority concluded:

“Participants in these proceedings provided more than enough information for the Board to make its decision. The record indicates that the Board considered all significant issues presented by the evidence. The objecting parties’ disagreement with the Board’s final determination and the weight it assigned to certain evidence, does not compel this court to reweigh the evidence on review. We hold that the Board did not fail to consider any important aspect of protecting groundwater from CCDD and [US] at fill site operations.” *Id.* ¶ 69.

¶ 36 Finally, the State and Will County argued that the Board’s decision was arbitrary because it ran counter to the evidence. The State and Will County specifically pointed to sampling data that showed groundwater contamination at several fill sites. *Id.* ¶ 72. The majority again rejected their argument, concluding:

“We find that the Board’s decision was adequately supported by the record of proceedings. Participants presented substantial evidence and testimony during multiple dockets, hearings, and public comment periods. According to the Board, Subpart G’s proponents did not show that compliant CCDD and [US] materials pose a threat to groundwater that justifies implementing Subpart G. Even without considering Subpart G’s economic reasonableness, the thorough record sufficiently supported the Board’s determination. Therefore, we cannot find the Board’s determination to be arbitrary, capricious, or unreasonable.” *Id.* ¶ 77.

¶ 37 Justice Wright dissented, disagreeing with nearly every aspect of the Board’s decision to reject subpart G. She opined, “The Board’s conclusion, that front-end regulations are sufficient to provide prospective protection for groundwater, represents a result-driven theory that favors industry without a sound, evidentiary basis.” *Id.* ¶ 82 (Wright, J., dissenting). She concluded that that decision was not only arbitrary, capricious, and unreasonable but also contrary to the legislature’s directions in the 2011 amendment to the Act. *Id.*

¶ 38 The State and Will County filed petitions for leave to appeal. See Ill. S. Ct. R. 315(a) (eff. Nov. 1, 2017). This court granted those petitions and consolidated the cases for review.

¶ 39 ANALYSIS

¶ 40 Environmental protection is a cornerstone of the 1970 Illinois Constitution. Article XI, section 1, provides, “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.” Ill. Const. 1970, art. XI, § 1. The General Assembly was given the authority to implement and enforce that policy (*id.*), which resulted in the passage of the Act (415 ILCS 5/1 *et seq.* (West 2016)). The Act established “a unified statewide program to restore, protect and enhance the quality of the environment in the State.” *People v. NL Industries*, 152 Ill. 2d 82, 90-91 (1992).

¶ 41 To carry out that program, the Act created the Board as an independent body of five “technically qualified members.” 415 ILCS 5/5(a) (West 2016). The Board is charged with determining and defining environmental protection standards through rules and regulations. *Id.* § 5(b); see also *id.* § 27(a) (“The Board may adopt substantive regulations as described in this Act.”). Sections 22.51(f)(1) and 22.51a(d)(1) instructed the Board to adopt rules regarding the use of CCDD and US as fill material that include “standards and procedures necessary to protect groundwater.” 415 ILCS 5/22.51(f)(1), 22.51a(d)(1) (West 2016). The Board did so but chose to omit the groundwater monitoring provisions proposed by the Agency in subpart G. The only question before us is whether that decision was arbitrary and capricious.

¶ 42 The Board has both quasi-judicial and quasi-legislative functions. *Landfill, Inc. v. Pollution Control Board*, 74 Ill. 2d 541, 554 (1978). When the Board conducts hearings on complaints charging putative violations of the Act, it acts in a quasi-judicial capacity. *Id.* When it promulgates regulations, it acts in a quasi-legislative capacity. *Id.* The Board’s regulations have the force and effect of laws, and they are presumptively valid. *Celotex Corp. v. Pollution Control Board*, 94 Ill. 2d 107, 126 (1983).

¶ 43 Judicial review of the Board’s decision to adopt certain regulations is necessarily limited. *Granite City Division of National Steel Co. v. Illinois Pollution Control Board*, 155 Ill. 2d 149, 162 (1993). Because the Board is composed of technically qualified individuals, their expertise is essential in crafting regulations. *Central Illinois Public Service Co. v. Pollution Control*

Board, 116 Ill. 2d 397, 412 (1987). “The Board, unlike this court, is well equipped to determine the degree of danger which a pollutant will cause, and then to balance the public threat against an alleged individual hardship ***.” *Monsanto Co. v. Pollution Control Board*, 67 Ill. 2d 276, 290 (1977). We do not judge the wisdom of a decision by the Board, only whether it is arbitrary and capricious. *Central Illinois Public Service*, 116 Ill. 2d at 412. The party challenging the decision bears a heavy burden to establish that it was clearly arbitrary and capricious. *Id.*; *People v. Pollution Control Board*, 103 Ill. 2d 441, 448 (1984) (“any further review of the Board’s action must be based on whether it abused its statutory authority by acting arbitrarily or capriciously”); *Illinois Coal Operators Ass’n v. Pollution Control Board*, 59 Ill. 2d 305, 310 (1974) (“administrative action taken under statutory authority will not be set aside unless it has been clearly arbitrary, unreasonable or capricious”).

¶ 44 The parties, however, stray from that familiar standard. Relying upon *Greer v. Illinois Housing Development Authority*, 122 Ill. 2d 462, 495-96 (1988), the parties assert that whether the Board’s decision was arbitrary and capricious is a threefold inquiry. In *Greer*, we stated:

“While it is probably not possible to enumerate all the kinds of acts or omissions which will constitute arbitrary and capricious conduct, the following guidelines apply. Agency action is arbitrary and capricious if the agency: (1) relies on factors which the legislature did not intend for the agency to consider; (2) entirely fails to consider an important aspect of the problem; or (3) offers an explanation for its decision which runs counter to the evidence before the agency, or which is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Id.* at 505-06.

¶ 45 The appellate court here, as well as in other cases (see, e.g., *Environmental Protection Agency v. Pollution Control Board*, 308 Ill. App. 3d 741, 751 (1999); *Waste Management of Illinois, Inc. v. Pollution Control Board*, 231 Ill. App. 3d 278, 284 (1992)), has applied *Greer* in reviewing decisions by the Board. While we have never done so, the parties exclusively discuss the *Greer* guidelines in their briefs. Thus, that approach provides a useful rubric in this case where the parties’ arguments would be otherwise difficult to cabin analytically. Accordingly, we will address each of the guidelines in turn.

¶ 46 1. Did the Board Rely on Factors That the Legislature Did Not Intend the Board to Consider?

¶ 47 The State contends that the Board relied on an improper factor when it focused on “the status” of CCDD and US as “non-waste.” The Board has both the authority and the obligation to protect groundwater from not only waste but all pollution. The State points to the definition of “water pollution” under the Act, which refers to the discharge of “contaminants,” not the presence of waste. 415 ILCS 5/3.545 (West 2016); see also *id.* § 3.165 (defining “contaminant” broadly as “any solid, liquid, or gaseous matter, any odor, or any form of energy, from whatever source”). The State then points to title II of the Act, concerning water pollution. Section 11(b) provides, “It is the purpose of this Title to restore, maintain and enhance the purity of the waters of this State in order to protect health, welfare, property, and the quality of life, and to assure that no contaminants are discharged into the waters of the State ***.” *Id.* § 11(b). Section 2(b) of the Illinois Groundwater Protection Act further provides that “it is the policy of the State of Illinois to restore, protect, and enhance the groundwaters of the State, as a natural and public resource.” 415 ILCS 55/2(b) (West 2016).

¶ 48 According to the State, sections 22.51(f)(1) and 22.51a(d)(1) of the Act are in line with that policy. Those sections expressed a concern about the risks to groundwater from CCDD and US, and they “directed the Board to address potential contamination in whatever form that contamination might take.” Consequently, the State insists that the Board injected into its decision an irrelevant and inappropriate consideration by focusing on whether those materials are waste. Will County echoes the State’s argument and contends that, even with “clean” debris and soil, some contaminants will enter unlined fill sites.

¶ 49 We hold that the State and Will County failed to establish that the Board’s decision was arbitrary and capricious for relying upon an improper factor when it considered whether CCDD and US are waste. First, the State was the architect of the purported error of which it now complains. That is, the State repeatedly and forcefully injected into these administrative proceedings the issue of whether CCDD and US are, or should be, considered waste. In public comments submitted two months before the Board’s first order, the State pressed several “over-arching principles,” one of which was its belief that “various classes of materials, which pose the same or similar risks to public health, safety and the environment” should be regulated in a consistent manner. Accordingly, the State urged the Board to adopt regulations that are “at least as comprehensive and protective as the regulations previously adopted by the Board for the disposal of inert wastes.” The Board’s 116-page first order rejected the State’s argument in two sentences. The Board stated that “CCDD and [US] are by statutory definition clean and uncontaminated and not a waste.” The Board further stated that “CCDD and [US] are not classified as wastes, so do not require the stringent rules that exist for nonhazardous waste landfills.”

¶ 50 Again, in prefiled testimony submitted a month after the Board’s first order, the State repeated its view that “CCDD has always been and continues to be a waste,” unless it meets the exceptions provided in section 3.160(b) of the Act. “Moreover,” the State continued, “CCDD is at a minimum ‘inert waste.’ ” The Board’s 130-page, second order rejected the State’s argument over two pages. The Board reviewed the statutory definition of CCDD, which provides that that material shall not be considered waste to the extent allowed by federal law. Because “[f]ederal law has no rule or statute directly on point,” the Board relied instead upon “the plain language of the statute in which the Illinois General Assembly found that CCDD and [US] as used as fill material are not a waste.”

¶ 51 In responses to questions from the Board during the subdocket B proceedings, the State tried another approach. Rather than claiming that CCDD is waste, the State asserted that it is “not actually ‘clean,’ as CCDD by its very definition may lawfully contain carcinogenic compounds in the form of PNAs (*i.e.* reclaimed or other asphalt) without reference to any regulatory levels.” The Board’s 66-page final order rejected that argument over two pages. According to the Board, the General Assembly distinguished between GCDD, which is waste, and CCDD and US, which are not. The General Assembly clearly did not intend CCDD and US to be treated as waste, inert or not. The Board’s three orders reflect the fact that it was the State who raised the “waste” issue. The Board disposed of it succinctly in each order and did not misdirect its focus from sections 22.51(f)(1) and 22.51a(d)(1).

¶ 52 Second, and more importantly, the question of whether CCDD and US constitute waste is relevant to determining what regulations are necessary to protect groundwater. The first *Greer* guideline suggests that an administrative agency’s decision may be arbitrary and capricious if

the agency relied upon an improper factor. That inquiry hinges on what the legislature intended the administrative agency to consider, so our analysis begins with the statutes at issue. In sections 22.51(f)(1) and 22.51a(d)(1), the legislature instructed the Board to adopt “rules for the use of CCDD and [US] as fill material” that include “standards and procedures necessary to protect groundwater.” Contrary to the State’s position, the legislative aim was not new regulations for protecting groundwater generally from all pollution but new regulations for protecting groundwater specifically from CCDD and US at fill sites. The definitions of those materials are an inherent part of the legislature’s directive, so they are a factor in the Board’s rulemaking.

¶ 53 The Board announced that its “first concern is that the CCDD and [US] to be deposited into quarries, mines, and other excavations be clean and uncontaminated as those terms are defined by the rules and the statute.” To address that concern, the Board repeatedly referred to the statutory definitions of CCDD and US, both of which mention that those materials are not waste. See 415 ILCS 5/3.160(b), (c)(1) (West 2016). The Board used the legislature’s own distinction between clean materials, which are not waste, and general materials, which are waste, in order to limit the scope of its regulations to the explicit instructions provided by the General Assembly. The Board believed that it could protect groundwater by ensuring, through enhanced “front-end” certification and screening requirements, that fill site operators abide by the statutory definitions of CCDD and US. The Board reasoned that if materials dumped at fill sites meet those definitions, they are not waste and need not be deposited in landfills, where stricter regulatory requirements apply. As the Board stated, “if the regulations provide assurances that the materials being deposited are indeed clean and uncontaminated and are adhered to, protection will be provided to public health and the environment, including groundwater.” We cannot say that the Board’s decision was arbitrary and capricious for reiterating that CCDD and US are not waste.

¶ 54 2. Did the Board Fail to Consider an Important Aspect
of the Problem Targeted by the Legislature?

¶ 55 The State and Will County contend that the Board ignored two important aspects of the groundwater protection problem—the costs of groundwater monitoring and the hazards of older and noncompliant fill. We reject both contentions.

¶ 56 A. The Costs of Groundwater Monitoring

¶ 57 The State acknowledges that the Board’s first order referred to the “potentially sizeable costs” for the fill industry if groundwater monitoring were required, but its final order did not mention costs. The State surmises that the Board abandoned its earlier statement because participants in the subdocket B proceedings generally agreed that any costs could be borne by generators of CCDD and US, who could be charged more on a per-unit basis by haulers or operators. Even industry representatives acknowledged that the costs of implementing groundwater monitoring were not onerous, while the costs of remediation were a much greater concern.

¶ 58 Will County also observes that the Board failed to address costs in its final order, despite divergent estimates from participants. Will County asserts that the Board’s solution to “the quandary about cost” was to avoid it. Will County labels the Board’s approach as “fear of an

unknown cost,” which ran afoul of its statutory duty to consider the economic reasonableness of its decision. See *id.* § 27(a) (“In promulgating regulations under this Act, the Board shall take into account the *** economic reasonableness of measuring or reducing the particular type of pollution.”). Like the State, Will County observes that the fill industry’s biggest concern was the cost of possible remediation. Will County insists that that concern is premature. The only issue before the Board was whether to test groundwater, not how to apportion the cost of remediation.

¶ 59 We hold that the State and Will County failed to establish that the Board’s decision was arbitrary and capricious for failing to consider the costs of groundwater monitoring. The Board did not ignore the costs of groundwater monitoring. In its first order, the Board discussed costs at length. The Board summarized the concerns of some participants with “the high costs associated with groundwater monitoring and the consequences of requiring such expenditures, including the potential closure of CCDD and [US] fill operations.” According to those participants, those higher costs would adversely affect businesses, municipalities, and ultimately taxpayers. The Board was disturbed by the inconsistency of the Agency’s acknowledgement that the costs of groundwater monitoring are unknown and its view that the fiscal impact will not be detrimental. The Board declined to impose a “costly groundwater monitoring program to protect against a perceived problem that the record does not support.”

¶ 60 The Board also mentioned section 27(a) of the Act, which provides that the Board must consider the economic reasonableness of any regulations. The Board stated that it received “numerous public comments addressing the economics of [the Agency]’s proposal” and heard testimony on the costs of complying with that proposal from fill industry representatives, as well as representatives from state and local governments. According to the Board, “[t]he cost of groundwater monitoring and particularly of testing samples was one area of concern.” The Board concluded, “The evidence in this record demonstrates that groundwater monitoring is costly and could potentially result in businesses closing. Therefore, the Board finds that groundwater monitoring is not economically reasonable.”

¶ 61 In its second order, the Board stated that several participants provided “cost break downs for groundwater monitoring.” The Board further stated that it appreciated that information, but it did not alter the decision that “soil certification and testing sufficiently protects groundwater” and monitoring is not required. And in its final order, the Board provided a summary of the first two orders. The Board noted that “participants provided information on the cost of groundwater monitoring” and “the record indicated that requiring groundwater monitoring would impose potentially sizable costs that may have adverse impacts on fill operations.” The Board also summarized comments from the State and the Agency, which offered their views on the costs of groundwater monitoring. While the Board’s third order did not repeat every finding in its prior orders, it did state that the Board had reviewed the entire record and considered additional comments and testimony in the subdocket B proceedings.

¶ 62 The Board devoted considerable attention to the costs of groundwater monitoring and balanced those costs against other considerations—namely, the potential closure of some CCDD and US fill sites, which could have a negative economic impact on not only the fill industry but also the public. We cannot say that the Board’s decision was arbitrary and capricious for failing to consider the costs of groundwater monitoring.

¶ 63 B. The Hazards of Older and Noncompliant Fill

¶ 64 The State contends that the Board did not give sufficient attention to the fact that materials placed at fill sites between 1997 and 2010 pose a current threat to groundwater. Even after the legislature distinguished between general and clean materials and allowed the latter to enter fill sites, adherence to the definition of CCDD was often lax. According to the State, the Board’s obligation to protect groundwater includes an obligation to do so even when the contamination is from older fill. The State adds that newer fill may not comply with regulations, either. The State mentions “many recent enforcement actions” against fill industry members, as well as “growing numbers of load rejections.” The State concludes that negligent and scofflaw generators and haulers continue to direct noncompliant CCDD and US into fill sites.

¶ 65 Further, the State asserts that the Board did not understand that its certification and screening requirements check for only certain contaminants and not other harmful compounds that are likely in CCDD and US. The State insists that the Board abrogated its mandate to protect groundwater by refusing to consider the dangers posed by older fill and even newer fill that may contain contaminants. Will County brings up the “Lynwood facility,” which operated from 1997 to 2003. At that site, the Agency tested groundwater and found exceedances for a variety of contaminants. Will County states that the site may be closed but fill deposited there continues to affect groundwater.

¶ 66 We hold that the State and Will County failed to establish that the Board’s decision was arbitrary and capricious for failing to consider the hazards of older and noncompliant fill. The second *Greer* guideline suggests that an administrative agency’s decision may be arbitrary and capricious if the agency failed to consider an important aspect of the problem targeted by the legislature. As we have discussed, the legislature sought to protect groundwater from CCDD and US at fill sites. That is, the legislature was concerned with materials that met the statutory definitions, not with older and noncompliant materials that may not have.

¶ 67 Thus, the Board properly focused on evidence from CCDD and US fill sites. The Board reviewed the extensive record in these administrative proceedings and found no evidence that a CCDD or US fill site operating within regulatory guidelines had caused groundwater contamination. In its first order, the Board noted “the lack of documented evidence of CCDD or [US] fill operations being a source of groundwater contamination.” The Board added that “the record does not include evidence to demonstrate that CCDD or [US] sites are a source of groundwater contamination.” Contamination from clean materials was a “perceived problem” for the Board, not a real one. In its second order, the Board noted that the State and the Agency argued evidence of groundwater contamination is not required. The Board disagreed, stating that “something more is required in this case where the record merely reflects that groundwater contamination is possible if the rules are not followed.” The Board recognized that mistakes are possible and some operators may ignore the law, but “the rules do provide checks at the fill sites to alleviate the potential” for mistakes. And in its final order, the Board stated that, despite evidence of enforcement actions and evidence regarding unregulated sites, “the record still does not provide indications of groundwater contamination at sites that are permitted under Part 1100.”

¶ 68 Moreover, subpart G exempted shuttered fill sites, so even the Agency’s proposal would not have protected groundwater from historical contamination at sites like Lynwood. And, as

The legislature directed the Board to adopt rules to protect groundwater from CCDD and US, providing an inexhaustive list of 12 ways to do so that the Board may consider, only one of which was monitoring. The Board exercised its rulemaking authority in three lengthy and well-supported orders in which it concluded that “back-end” groundwater monitoring was unnecessary because “front-end” certification and screening would keep contaminants out of CCDD and US fill sites and, thus, satisfy the legislature’s directions in sections 22.51(f)(1) and 22.51a(d)(1). We cannot say that the Board’s decision was arbitrary and capricious for offering an explanation that was counter to the evidence or implausible.

¶ 74 In closing, we return to the language of our constitution. Under the 1970 Illinois Constitution, a foundational public policy in this state is providing and maintaining a healthy environment. Determining how best to do that is not the responsibility of this court, however, but of the General Assembly and the Board. If the legislature believes that the Board’s decision to drop the subpart G groundwater monitoring requirement runs counter to the mandate to protect groundwater, the legislature may direct the Board to adopt a groundwater monitoring program for CCDD and US fill sites. And any person, including the State and Will County, may present a written proposal regarding groundwater monitoring to the Board. See 415 ILCS 5/28 (West 2016).

¶ 75 **CONCLUSION**

¶ 76 For the reasons that we have stated, the judgment of the appellate court affirming the decision of the Board is affirmed.

¶ 77 Appellate court judgment affirmed.

¶ 78 Board decision affirmed.

¶ 79 JUSTICE KILBRIDE, dissenting:

¶ 80 Despite the Agency’s strong and repeated entreaties, a majority of this court concludes that the Board’s exclusion of mandatory “back-end” groundwater monitoring in its CCDD and US fill site rules did not fail to consider any important aspect of the problem the legislature intended to target in sections 22.51(f)(1) and 22.51a(d)(1) of the Act (415 ILCS 5/22.51(f)(1), 22.51a(d)(1) (West 2010)). I disagree. Sections 22.51 and 22.51a expressly require the Board to adopt “standards and procedures *necessary to protect groundwater*”—without any limitation on the timeframe of the potential groundwater harm. (Emphasis added.) 415 ILCS 5/22.51(f)(1), 22.51a(d)(1) (West 2010). The Board’s final order does not comport with that statutory mandate. Both our legislature and our constitution have adopted a proactive approach to environmental protection. See Ill. Const. 1970, art. XI, § 1 (declaring the state’s policy is “to provide and maintain a healthful environment for the benefit of this and future generations”); 415 ILCS 55/2(b) (West 2010) (Illinois Groundwater Protection Act) (stating that preventing the “waste and degradation of the [groundwater] resources” is consistent with expressed state policy). In my view, the Board’s errors can be traced to its focus on the wrong question, considering whether there was evidence of groundwater contamination rather than how to protect groundwater from potential contamination.

¶ 81 The Board relies in part on a purported distinction between the risk to groundwater presented by “current” and “historic” fill. That reliance, however, is inconsistent with the

language of the Act. In section 22.51(f)(1), our legislature expressly enumerated a series of options the Board could adopt to fulfill its obligation to craft “standards and procedures necessary to protect groundwater.” Among the action items listed was “corrective action.” 415 ILCS 5/22.51(f)(1) (West 2010). Applying the plain and ordinary meaning of “corrective,” “corrective action” means conduct designed “to make or set right” or “to alter or adjust so as to bring to some standard or required condition.” Webster’s Collegiate Dictionary 260 (10th ed. 1997). Thus, any “corrective action” taken by the Board would necessarily modify a preexisting, or “historic,” condition needing remediation. Here, that condition is groundwater contamination due to the use of CCDD or US in unlined quarry sites.

¶ 82 Notwithstanding this obvious connection between “historic” fill and the need for “corrective action,” the Board insists its statutory mandate is limited to developing rules to protect against groundwater risks arising from only *current* CCDD and US. In making this claim, the Board relies, in its brief, on the statute’s reference to “the *use of* CCDD and [US] as fill material at CCDD *operations* and [US] *operations*.” (Emphases in original.) In defending this interpretation, the Board protests that “the People, Will County, and Amici attempt to shoehorn a comprehensive rule to protect groundwater from historical contamination into a rulemaking proposed to protect groundwater from potential contamination by the use of CCDD and [US].” The Board is effectively arguing that it has not been asked to “protect groundwater” from all contamination due to the use of CCDD and US even though the plain language of the statute requires its rules to address both ongoing and future groundwater harm from the use of CCDD and US. Reading the Board’s mandated duty under section 22.51(f)(1) as being to create “standards and procedures to protect groundwater” that include the adoption of “corrective action” when warranted, I reject the Board’s claim that the petitioners are somehow improperly “attempt[ing] to shoehorn” additional measures not authorized by law into the rules.

¶ 83 By enacting the plain language of section 22.51(f)(1), the legislature unambiguously expressed its intent to protect groundwater from all CCDD and US used in disposal operations—without *any* limitation on the relevant timeframe. Contrary to the Board’s assertion in this court, the legislature did *not* “provide[] the Board with a specific context for CCDD operations and [US] operations that included a requirement to protect groundwater on a prospective, not retrospective, basis.” Section 22.51(f)(1) simply does not draw a sharp distinction between the need to protect groundwater from current versus historic fill. The Board’s unduly narrow reading of its statutory duty to establish the “standards and procedures necessary to protect groundwater” is not supported by the statute.

¶ 84 On the other hand, the State and county’s understanding of the scope of the Board’s statutory directive is consistent with the language chosen by the legislature. It is a fundamental precept of statutory construction that courts must review statutes as a whole, bearing in mind the subject matter they address and the apparent intent of the legislature. *Van Dyke v. White*, 2019 IL 121452, ¶ 46. Here, the rules adopted by the Board failed to comport with the broad directive legislatively conferred on it to protect this state’s groundwater resources.

¶ 85 Our state constitution also explicitly champions the Act’s environmental goals by declaring that a cornerstone of this state’s public policy is “to provide *and maintain* a healthful environment for the benefit of this and future generations.” (Emphasis added.) Ill. Const. 1970, art. XI, § 1. The Board’s actions “entirely fail[] to consider an important aspect of the

problem” (*Greer v. Illinois Housing Development Authority*, 122 Ill. 2d 462, 495 (1988)) constituting an unreasonable abuse of its statutory authority. See *supra* ¶¶ 43-44 (citing the reviewing standards in *People v. Pollution Control Board*, 103 Ill. 2d 441, 448 (1984), and *Greer*, 122 Ill. 2d at 495-96). Because the Board’s interpretation of the relevant statutory language fails to give effect to the statute as a whole, instead selectively disregarding a key portion of it, the Board has failed to act in accordance with both its statutory mandate and this state’s express public policy. For those reasons alone, I cannot agree with the conclusion that the Board properly exercised its statutory rulemaking authority in this case.

¶ 86 My dissent is further prompted by the Board’s insistence that it merely “declined to impose what the evidence showed were costly groundwater monitoring programs to protect against ‘a perceived problem’ that the record did not support as even being a problem.” The record refutes both the Board’s contention that groundwater harm presents only a “perceived problem” unsupported by the record and that monitoring programs are unduly costly.

¶ 87 The record in this case shows the problem being addressed in sections 22.51 and 22.51a is very real. The simple fact that the legislature directed the Board to adopt rules protecting groundwater from CCDD and US deposited into disposal sites shows it believed the risk of groundwater contamination, inadvertent or otherwise, was not just “a perceived problem” but a sufficiently serious actual “problem” to require specialized oversight.

¶ 88 As discussed below, even properly run sites in full compliance with existing regulations have been discovered to have levels of dangerous polynuclear aromatic hydrocarbons (PNAs) and metals above the maximum allowable concentrations (MACs) as well as a variety of other hazardous materials present at levels somewhat below the MACs. Thus, even purportedly compliant CCDD and US endanger this state’s groundwater resources and citizens’ health. As the Agency concludes, despite “even the best intentions and following the screening and soil acceptance procedures, soils with contamination above the MAC are being accepted at the operating sites.” The use of CCDD and US as fill in unlined quarry sites presents an actual problem that the legislature directed the Board to address in its rulemaking. The adequacy of the Board’s decision to require only front-end screening to satisfy that mandate, without any back-end groundwater monitoring, is the subject of this appeal.

¶ 89 The record is replete with evidence that front-end screening is imperfect at best, particularly since large volumes of fill are frequently at issue. Mandatory visual and odor inspections of that fill have long been in place, even though those approaches have obvious limitations. And those limitations necessarily increase with the size of the load being monitored. Along with visual screenings, the Board has required screening for dangerous volatile organic chemical compounds with photo ionization detectors (PIDs) since 2016, when it adopted the part 1100 CCDD regulations. The use of PIDs, however, is frustrated by a number of limitations similar to those impeding visual inspections of large waste streams. Indeed, PIDs suffer from a multitude of other accuracy and reliability issues as well when employed under many common conditions, such as exposure to electrical interference from power lines, transformers, and other electrical fields or even to routine weather phenomena, including high wind, humidity, and rain. PIDs are also designed to detect only some types of toxic chemicals and will not alert operators to the presence of many other hazardous chemicals that can create serious health risks or environmental damage.

¶ 90

As for the Board’s suggestion that it refused to adopt groundwater monitoring because it is too “costly,” that assertion is inconsistent with the evidentiary record. When addressing industries as lucrative as disposal operations, the acceptable costs must be viewed in light of the value and profitability of the relevant operations. After citing a Chicago Sun-Times article that reported a CCDD site in Will County had been sold for \$17.7 million, Director Dean Olson of the Will County Land Use Department noted the sale price “indicates that a significant amount of profit is anticipated by the operator,” making it “difficult to understand ‘why a CCDD owner or operator cannot afford to install a groundwater monitoring system and sample groundwater.’ ” Naturally, the cost of groundwater monitoring must be considered in light of disposal operations’ high degree of profitability. Evaluating the cost of measures needed to fulfill the Board’s mandate to protect groundwater must consider all the relevant factors and circumstances, including the potential remediation costs if screening alone is not effective. The final order in this case, however, did not even mention the potentially enormous cost of groundwater remediation if monitoring is not required.

¶ 91

As for the actual costs at issue, the record reveals that the Board was presented with a range of possible monitoring costs and scenarios. The consensus of most industry testimony was that designing, installing, and maintaining monitoring wells, along with groundwater sampling and analysis, was economically feasible when viewed as only a slight increase in cost per cubic yard of fill deposited over the lifespan of each disposal site. The additional cost would constitute only a small increase in the tipping fees already being charged to disposers. While it was possible that some sites would close if faced with the up-front expense of monitoring wells, industry members also testified that remediation costs presented a far bigger concern—one that could easily put operators out of business. Although the impact of high remediation costs due to delays in discovering groundwater contamination undoubtedly represented a significant factor in evaluating the feasibility of back-end monitoring, the Board’s orders never discussed any potential remediation costs or the impact of those costs on the viability of industry entities—or on taxpayers who would have to foot that bill because the source of the contamination was later untraceable. Because the Board’s final order did not consider all of the relevant costs, it failed, again, to consider an important aspect of the problem, making it arbitrary and capricious under the *Greer* test.

¶ 92

Finally, the Board asserts its order fulfilled its statutory duty because it was not charged with adopting rules to protect groundwater from “noncompliant” CCDD and US. Instead, the Board asserts it chose to focus on “ensur[ing] that CCDD and [US] deposited in quarries met the definitions in Sections 22.51 and 22.51a of the Act.” That focus, however, presupposes an overly optimistic view of the effectiveness of front-end regulations alone, particularly given the historic realities of disposal site contamination and the potential for serious harm to the environment and to Will County residents. The actual state of the grounds surrounding current CCDD disposal sites does not engender that optimism.

¶ 93

Even though MAC limits had already been imposed on fill, the Agency’s 2012 test of soil samples from 12 CCDD sites revealed that 10 of those sites exceeded the MACs for metals and semivolatile organic compounds or applicable pH limits. In other words, the vast majority of sites already subject to regulation by the Board contained serious contamination problems. In addition, the record shows that, even after the enactment of the latest amendments to the Act, 13 enforcement actions have been brought for violations of the regulations governing CCDD facilities. That evidence proves that the prospect of industry noncompliance is far from

speculative. The Board also heard about an industry analysis of samples from 44 borings taken from around 3 CCDD fill sites. That study revealed levels of both PNAs and metals above the MACs, as well as concentrations of volatile chemicals, PCBs, and pesticides. That testimony is further evidence of the reality of underground contamination permeating CCDD sites, contamination that is likely to implicate groundwater quality since CCDD and US are deposited below ground level—often directly in the saturated zone, where groundwater flows.

¶ 94 While the Board argues that none of this soil testing has established *groundwater* contamination at any regulated CCDD or US site, that argument ignores two critical facts. First, no evidence of groundwater contamination is available *precisely because* the Board has never required back-end groundwater monitoring. Quite obviously, *no testing* necessarily equates to *no evidence* of contamination. Second, it defies logic to assert that, even with the prior adoption of preventative front-end regulations, dangerous, even carcinogenic, chemicals have already leached into the soil around unlined CCDD and US sites but that those chemicals have no implications for the groundwater underlying those sites.

¶ 95 The Board’s stated reliance on CCDD and US being inherently “clean” is also unpersuasive. For example, “clean construction or demolition debris,” by definition, includes “reclaimed or other asphalt pavement.” 35 Ill. Adm. Code 1100.103 (2012). Asphalt, in turn, routinely contains debris from vehicles, road salts, oils, and seal coating—materials that can endanger the quality of this state’s groundwater. Thus, even fill that meets the technical definition of “CCDD” can threaten the safety of our groundwater. Indeed, sound scientific evidence suggests that asphalt itself may pose a serious groundwater threat since it can contain PNAs that are known to cause cancer. Nonetheless, the Board’s second-notice order concluded that, “[a]s the rules do not allow for contaminated material to be placed in a fill operation, the Board [was] unconvinced that groundwater monitoring is required.” That statement ignores the nature of the “compliant” materials that may be deposited in CCDD and US fill sites throughout Illinois.

¶ 96 The Board’s rulemaking also permitted entities seeking to dispose of material in CCDD and US fill sites to self-certify that those waste streams presumptively comply with established standards because they come from properties that are not “potentially impacted” by hazardous materials—without any third-party confirmation. As evidenced in the record, however, self-certification is often ineffectual. Despite the existence of mandatory fill certification procedures, disposal sites submitted 417 load rejection sheets between September 2012 and June 2013, with 65% of the self-certified loads being rejected for high PID readings, indicating hazardous levels of toxic chemicals. In other words, through error, inadvertence, or perhaps intentional deception, each of those 417 purportedly “clean” fill loads violated the safety standards put in place by the Board even after being certified as being in compliance with those regulations by the very entities charged with verifying their safety.

¶ 97 Economic factors further undermine the adequacy of self-certification requirements. Disposal at CCDD and US fill sites provides enormous cost savings over disposal in landfills. In fact, disposal at CCDD and US fill sites costs about 75% less than dumping at landfills, a savings that greatly benefits disposers’ bottom lines. Along with those financial incentives, of course, come vastly increased pressures and temptation for cost-conscious disposers and site operators alike to overlook problems with incoming fill or to cut corners on measures intended to ensure the quality of material being deposited at CCDD and US fill sites. While in a perfect

world, front-end regulations would ensure that fill consisted of only “compliant” material meeting the statutory definitions of “clean” CCDD and US, in the real world, it is a virtual certainty that noncompliant material will, intentionally or not, make its way into unlined disposal sites. The Board’s belief that front-end-only regulations can adequately protect Will County’s groundwater resources and ensure compliance from both disposers of fill and CCDD and US site operators is, at best, naïve. The Board has effectively put on blinders to the realities presented in the record, ignoring evidence of industry noncompliance and unduly minimizing the risk presented by continuing noncompliance.

¶ 98 In the absence of any evidence of a foolproof means of detecting noncompliant materials before they contaminate the groundwater relied on by 71% of the residents of Will County, the Board’s final order both seriously undermines the safety goals underlying sections 22.51 and 22.51a and defies the preventative approaches to protecting groundwater mandated in the Illinois Groundwater Protection Act (415 ILCS 55/2 (West 2010)). As the Agency notes, “without groundwater monitoring, there will be no mechanism to identify groundwater contamination at an early stage to take preventive action.” The United States Supreme Court has also recognized the critical need for early action. In *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 132-33 (1985), the Court declared that the “[p]rotection of aquatic ecosystems *** demanded broad federal authority to control pollution, for ‘[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.’ [Citation.]” Because the hydrologic cycle results in groundwater being transported unpredictably through seepage and flow paths in the earth, the destructive effects of groundwater contamination are pervasive (see Thomas C. Winter, Judson W. Harvy, O. Lehn Franke, & William M. Alley, *Ground Water and Surface Water: A Single Resource*, U.S. Geological Survey Circular 1139 (1998), <https://pubs.usgs.gov/circ/circ1139> [<https://perma.cc/M57X-TBTF>]).

¶ 99 Here, the evidence shows that, acting alone, the Board’s front-end regulations cannot realistically provide effective control of pollution at the source before it infiltrates Will County’s groundwater. Although back-end monitoring would provide a vital early check on the efficacy of front-end screening procedures, it was rejected. Thus, the Board failed to fulfill its statutory mandate by not considering all aspects of the problem addressed in sections 22.51 and 22.51a. While the majority suggests that the legislature could intervene and “direct the Board to adopt a groundwater monitoring program for CCDD and US fill sites,” the far superior, and legally required, solution is for the Board to fulfill its statutory duty. To do so, it must first comply with the broadly protective plain language of statutes such as sections 22.51 and 22.51a. It must then apply those mandates with an eye toward solving the real-world problems evidenced in the record to achieve real-world results, consistent with Illinois’s express policy to protect its natural resources.

¶ 100 Because the Board misapprehended its statutory mandate and adopted a *laissez-faire* “wait-and-see” approach that required only front-end screening, with all its inherent limitations, in lieu of back-end groundwater monitoring, it ignored important aspects of sections 22.51 and 22.51a. For those reasons, I respectfully dissent from the majority opinion.

¶ 101 JUSTICE BURKE took no part in the consideration or decision of this case.