BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:	)	
	)	R 2022-018
PROPOSED AMENDMENTS TO	)	
GROUNDWATER QUALITY	)	(Rulemaking – Public Water Supply)
(35 ILL. ADM. CODE 620)	)	

NOTICE OF FILING

To: ALL PARTIES ON THE SERVICE LIST

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Illinois Pollution Control Board, the **NATIONAL WASTE & RECYCLING ASSOCIATION'S PUBLIC COMMENT**, copies of which are hereby served upon you.

Dated: March 3, 2023

By /s/ Claire A. Manning

BROWN, HAY & STEPHENS, LLP
Claire A. Manning
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com

SORLING NORTHRUP
James M. Morphew
1 North Old State Capitol Plaza
Suite 200
P.O. Box 5131
Springfield, IL 62705
jmmorphew@sorlinglaw.com

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NATIONAL WASTE & RECYCLING ASSOCIATION'S PUBLIC COMMENT

Now comes Claire A. Manning, Brown, Hay + Stephens, LLP, and on behalf of the National Waste and Recycling Association ("NWRA"), submits this public comment to the Illinois Pollution Control Board ("Board") at the conclusion of its regulatory proceedings held for the purpose of evaluating the merits of Illinois Environmental Protection Agency's (Illinois EPA's) proposed modifications to the Board's Part 620 groundwater rules. We thank the Board for its attention and consideration to this game changing rule proposal.

And game changing it is – notwithstanding the IEPA's "business as usual" approach to this important rulemaking. First, the Illinois EPA here attempts to address an issue of national and international attention and significance – by crafting and proposing for Board adoption – arbitrary and extremely stringent groundwater quality standards ("GQSs") to be applicable to a variety of perfluoroalkyl and polyfluoroalkyl substances (referred to generally and collectively as "PFAS"). Due to their intrinsic and ubiquitous nature, and the difficulty in removing them from the environment, PFAS has become known in the press as "forever chemicals". Unlike any of the compounds previously regulated by the Board in its Part 620 rules, PFAS compounds are part of our daily lives – ever present in our daily household consumer purchases – and accordingly our consumer waste stream. PFAS is found in household cleaning solutions; water-resistant fabrics such as rain jackets, umbrellas and tents; grease-resistant paper; nonstick cookware; personal care products like shampoo, dental floss, nail polish and eye makeup; and stain-resistant coatings on carpets, upholstery and other fabrics. As recently as 2018, greater than 90% of the

US population had a mean blood serum concentration for PFOA and PFOS of 1.4 ug/l and 4.3 ug/l respectively which is nearly 1000 times greater than the proposed GQSs. See Pre-Filed Test. of T. Hilbert, pg.7, Sept. 15, 2022.

Second, the Illinois EPA's regulatory approach fails to address or evaluate the many issues raised by stakeholders, including the Groundwater Advisory Council – and fails to support its approach to PFAS regulation with any valid relevant technical or economic studies, wholly ignoring Section 27 of the Illinois Environmental Protection Act, 415 ILCS 5/27.

Third, the Illinois EPA's regulatory approach is at odds with federal strategy that is being developed by the United States Environmental Protection Agency ("USEPA") and will be applicable to all states – including, of course, Illinois.

Fourth, in proposing these new PFAS standards, the Illinois EPA affirmatively fails to address the impact to other Board regulatory programs, especially programs that are required to monitor and meet Part 620 GQSs, such as the Board's landfill regulations. Further, the Illinois EPA refuses to provide the parties (or the Board) with any indication as to when, or even whether, it intends to present regulatory proposals to modify those rules. Yet, it nonetheless intends to make these standards immediately enforceable in the context of a myriad other programs that require adherence to the Board's Part 620 standards – without any consideration given to the reasonableness of costs, or feasibility of technology, required to achieve these standards.

For all the above reasons, and as further explained below, NWRA urges the Board to not move forward with the Illinois EPA's proposed rule at this time.

I. PFAS regulation is not business as usual in the context of environmental regulation and the Illinois EPA's proposal is not consistent with Illinois Groundwater Protection Act and the Board's regulatory history concerning adoption of GQSs

and, accordingly, is not the appropriate first step for Illinois' regulation and elimination of PFAS from the environment and protection of the public.

Admittedly, in the Board's early groundwater rulemaking it envisioned potability as a goal for Illinois groundwaters that might someday be capable of being used as potable water; however, it did not and could not reasonably declare that all Illinois groundwater had to be treated as if it was potable – hence, the creation of various categories of groundwater which, in this rulemaking, are wholly ignored.

After R89-14 and over the years, the Board has weaved the Part 620 GQSs into various other regulatory programs administered by the Illinois EPA. The Illinois EPA in no uncertain terms considers GQSs enforceable standards in those programs – requiring compliance with those GQSs, whatever the risk. On this record, the Illinois EPA indicated an intention to make its proposed GQSs immediately enforceable in landfill permits – as they are renewed. This position causes great anxiety on an industry that (a) has not caused the PFAS problem; (b) must continue to accept PFAS containing products as part of the waste stream; and (c) cannot reasonably be expected to comply, given existing technology and costs, with regulations or permit conditions that presume an obligation to remediate groundwater to the very stringent standards proposed.

Further, the Illinois EPA refuses to consider costs and feasibility on this record, citing dicta from the Board's 2012 groundwater rulemaking that adopted GQSs for various constituents that were routinely found in the site remediation clean-ups but had not yet been covered by Part 620. NWRA is confident the Board will readily see the fallacy of that link. First, the Board in that proceeding faced little controversy over the proposed standards themselves, as they were based upon standards that had been widely accepted by the USEPA and in the Board's TACO and site remediation programs. Second, where there was controversy, the State addressed it (for

example, at the request of IERG, it made certain changes and the Illinois EPA withdrew its proposed standard for molybdenum). Third, no one appeared to have raised cost considerations as an issue and, in any event, the Board *did* address costs, finding: "*based upon this record*, the amendments proposed….would not impose an economic or technical burden significantly different than that resulting from prior 620 rulemakings or have an adverse economic impact upon the people of Illinois." (emphasis added). See R08-18, Opinion and Order, Aug. 8, 2012.

Here, the record is replete with evidence as to how removal and/or treatment of these specific and ubiquitous PFAS chemical compounds presents a challenge the likes of which Illinois – and the country – has never before seen. With that challenge comes cost – and new technologies. And with that challenge and cost comes an obligation on the part of the Illinois EPA to address, and the Board to consider, the costs and feasibility of meeting the standards proposed.

Further, the Illinois EPA's position that the Illinois Groundwater Protection Act ("IGPA"), 415 ILCS 55/1 et. seq., and associated Board groundwater regulatory history discussing "resource waters" justifies its treatment of groundwater standards as if they were out-of-the-tap drinking water standards, is erroneous. Indeed, the terms "resource water" and "potable" are defined differently in the IGPA. Section 3(h) defines "potable" as meaning "generally fit for human consumption in accordance with accepted water supply principles and practices" while Section 3(j) – without reference to the definition of potable – generally defines "resource water" as "groundwater that is presently being or in the future capable of being put to beneficial use by reason of being of suitable quality." *Id*. at 55/3(h) and 55/3(j).

Further, the Illinois EPA's proposal ignores what the Board in R89-14(B) deemed the "particular mandate of the IGPA pertinent to today's action" when, at p. 3 of R89-14(b) (Nov. 7, 1991), it quoted from Section 8 of the IGPA:

> The [Illinois EPA], *after consultation with* the [Interagency Coordinating Committee on Groundwater] and the [Groundwater Advisory Council], shall propose regulations establishing comprehensive water quality standards which are specifically for the protection of groundwater. In preparing such regulations, the [Illinois EPA] *shall address, to the extent feasible,* those contaminants which have been found in the groundwaters of the State and which are known to cause, or suspected of causing, cancer, birth defects, or any other adverse effect on human health *according to nationally accepted guidelines*.

Mandate #1 in Section 8 is that the Illinois EPA consult with the Interagency Coordinating Committee on Groundwater ("ICCG") and the Groundwater Advisory Council ("GAC") prior to proposing any groundwater rule to the Board. Such consultation has effectively and fully occurred in virtually every previous Part 620 rulemaking save this one, and in those prior rulemakings the Illinois EPA reported that the ICCG and GAC were consulted and generally supported the proposed rules.

The ICCG and GAC bring to bear resources from other agencies and departments of state government, and the private sector, in a manner that should require genuine consideration by the Illinois EPA prior to filing with the Board. See Section 4 ("ICCG") and Section 5 ("GAC") of the IGPA, 415 ILCS 55/4 and 55/5. Appointed by the Governor and charged with the responsibility of reviewing, evaluating and making recommendations related to state law and regulations, including groundwater policy, research, collection and analysis – the GAC in no uncertain terms has objected to the Illinois EPA's proposed rulemaking. See Public Comment #1, attached hereto as Exhibit A.

Under questioning at hearing the Illinois EPA's witness still did not actually address the substance of the GAC's comments. Instead, the Illinois EPA witness testified, rather summarily,

that during the many meetings the Illinois EPA held with the GAC, they simply were unprepared to ask any relevant questions "of what was going on". See March 9, 2022, Tr. At pp. 179-80:4-24,1-16.

To the objective observer, what appears more clear from the record here is that (a) the GAC *did* provide comment; (b) those comments were straightforward objections to proceeding in the fashion Illinois EPA has proceeded; and (c) the only thing the GAC appears *not to have done* is agree that the Illinois EPA's proposal is the right regulatory approach for Illinois.

Mandate #2 in Section 8 of the IGPA is that the Illinois EPA, in preparing its regulations, shall address contaminants "to the extent feasible". Here, the Illinois EPA's justification and testimony falls far short of providing any coherent evidence that its proposed PFAS GQSs are achievable in the various Board regulatory programs that require adherence to its Part 620 standards. The Board should not countenance the Illinois EPA's unwillingness to discuss this important aspect of its proposed regulations.

Further, Illinois EPA's approach negates the tiered, risk-based approach to groundwater protection that has been the hallmark of groundwater regulation in Illinois. First, the Illinois EPA ignores the four categories of groundwater made applicable in Illinois by the Board's first groundwater rulemaking, instead proposing the same numerical standard for all categories – despite the fact that only Class I groundwater is designated "potable". Carol Hawbaker's testimony on this point is unconvincing and does not provide justification for the Illinois EPA's approach. See June 21, 2022, Tr., pp.21. Second, the Illinois EPA's proposal wholly ignores feasibility of remediation to the GQSs proposed – which will lead to enforcing standards which are not reasonably necessary at a given location and cannot be reasonably achieved. This approach is contrary to the reasonableness considerations that led to the Board's more recent

approach to groundwater protection, as set forth in the risk-based remediation objectives contained in Part 742.

In sum, Illinois EPA witnesses failed to sufficiently articulate a justifiable rationale for mandating the identical standard for all groundwater, regardless of classification – or for creating a drinking water standard in the guise of a groundwater standard applicable to all groundwater. This is an arbitrary and unrealistic approach – and contrary to the statutory mandates created under the IGPA and the Environmental Protection Act ("Act") at Section 27, 415 ILCS 5/27.

The result: proposed modifications to the Board's groundwater rules that may well be observed more in the violation that in the adherence – as there has been no attention given to the issue of whether these standards are even achievable in the context in which they will be applied: as enforceable standards for those entities who, under other Board-adopted regulatory programs not discussed in this rulemaking, are obligated to monitor and comply with these new and stringent GQSs. This would be a sad situation for Illinois' groundwater program, as the State ought to be able to enforce *reasonable regulations* – and the regulated community ought to understand its obligations and be able to comply.

II. Neither the record nor the Act supports Illinois EPA's proposed rules as the Illinois EPA ignores the Act's statutory mandate related to cost and feasibility and the Illinois EPA has failed to address the many concerns raised by the stakeholders.

Prior to proposing a rule to the Board, the Illinois EPA generally reaches out to the many stakeholders who will be impacted by the rule, to address important concerns prior to filing. Here, while there were many valid concerns raised by the regulated community related to cost, feasibility, workability, and applicability (to other programs not the subject of the immediate rulemaking), virtually none of those concerns were addressed. See March 8, 2022, IEPA Pre-Filed Answer to NWRA.

NWRA and its member companies have continually expressed frustration about moving forward without also addressing regulatory programs that mandate compliance with the State's GQSs (such as the Board's landfill rules and other land rules). The Illinois EPA has not only turned a deaf ear, but also has refused to articulate when (and even whether) it intends to present rule proposals to the Board that will address those concerns. Further, the Illinois EPA has refused to discuss cost or feasibility as it relates to compliance with the proposed GQSs under other programs – for the very reason that those programs are not the subject of this rulemaking. This circular reasoning provides no justification for the Board to move forward with the Illinois EPA's proposed GQSs for PFAS at this time.

Specifically as to costs of implementing the proposed parts per trillion PFAS standards, the Illinois EPA's key witness, Ms. Carol Hawbaker, stated: "I can't speak to cost … my background is risk assessment and toxicology, I don't know what the costs would be." See June 21, 2022, Tr., p. 34:3-4. Additionally, Mr. Greg Dunn, the Illinois EPA's other supporting witness stated: "As far as the cost, that is hard because we don't know what the number is going to be in the end." See June 21, 2022, Tr., p. 26:4-12. Then further acknowledged the Illinois EPA's lack of attention to the costs of its proposal, and it's implement-first-at-whatever-cost approach, stated: "Because we don't know what those costs are and we don't know, as you start alluding to some of the programs, landfills are different from the site remediation program and the underground storage tank program, where those costs may be very minimal or none depending on the use of 742" (referring to the Board's programs that take a risk based approach to groundwater, such as the Tiered Approach to Corrective Action ("TACO") rules.) See June 21, 2022 Tr., p. 27:16-22.

This cost-avoidance approach is antithetical to the Act itself – and does not justify the Board moving forward with the Illinois EPA's proposal. As one of the Act's authors and the Board's first chairman, David P. Currie, explained: the drafters intentionally included what he considered "essential limiting constraints on Board pursuit of the statutory objective of a clean environment" by the explicit language of Section 27 of the Act (requiring that in promulgating regulations, the Board "*shall* take into account...the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution"). See *Rulemaking under the Illinois Pollution Law,* 42 University of Chicago Law Review 457 (1975) at 458. See also *Cnty. Of Will v. Pollution Control Bd.*, 2019 IL 122798, ¶ 60, 135 N.E.3d 49, 64.

Left without any record evidence of costs or feasibility from the Illinois EPA, the Board must credit the vast information presented by the participants (i.e., that the Illinois EPA's proposed GQSs are neither.) See, generally, Testimony of Thomas Hilbert discussing costs of Vermont study.

III. The Board should not move forward with the Illinois EPA's proposal here as it is at odds with the Act and developing federal strategy – and is more stringent and unworkable than that developed or being developed in other states.

Clearly, the problem of PFAS is a problem that requires a holistic, national solution – not the piecemeal approach taken here, that primarily falls on the backs of those entities who perform the public service of accepting household waste and wastewater – and not on the backs of those who have released PFAS containing products into the environment. This approach too is antithetical to the Act, as envisioned by the legislature in its legislative declarations at Section 2(b):

> It is the purpose of this Act, as more specifically described in later sections, to establish a unified, state-wide program supplemented by private remedies, to restore, protect and enhance the quality of the environment, and *to assure that adverse effects upon the*

> *environment are fully considered and borne by those who cause them*. 415 Ill. Comp. Stat. Ann. 5/2 (emphasis added).

Indeed, without a more holistic approach and solution, PFAS containing products remain in the environment, continuing to be part of the waste stream that must be collected and disposed – and continuing to add pressure and costs onto to those entities who provide the public service of disposal. Already, those pressures have created chaos as to the transport, disposal and treatment of sludge (from wastewater treatment plants or WWTPs) and leachate (from landfills). Where heretofore it has been commonplace for landfills to accept sludge from WWTPs and WWTPs to accept leachate from landfills, that "disposal trade" is being disrupted as entities fear assuming further responsibility for PFAS containing waste – begging the larger looming questions: where and how can these byproducts be safely disposed and/or treated to the proposed standards – and when and how will PFAS contamination be eliminated at its source? Yet, although technologies are being developed and tested, there are currently no cost-effective feasible solutions to the wholesale elimination of PFAS from the environment – or to achieve remediation of groundwater to the very strict standards here proposed.

NWRA recognizes and appreciates that further regulatory efforts are underway and looks forward to federal regulation, applicable to a company's operations in all states, that is based upon relevant data and feasible approaches. For example, in January 2023 the USEPA announced *Effluent Guidelines Program Plan 15*, in which it announced plans to immediately conduct rulemakings related to effluent, including effluent guidelines and pretreatment standards for landfills to address PFAS. Unlike here, these proposals will be based upon information and data collected from landfills as part of a study specific to landfill leachate.

Importantly, the USEPA has developed and is implementing a federal strategy – which has many moving parts and is routinely updated.[1]

Other states also are proposing or adopting regulations specific to landfills – based upon knowledge gained through working with landfill owners and operators. For example, the Michigan PFAS Action Response Team set out an action plan that consisted of working with landfill owners who have identified PFAS impacts. That plan involves: determining the extent of PFAS contamination; addressing any potential impacts to human health or the environment; continuing to work with landfill owners to identify sites with PFAS impacts; collaborating with the Treatment Technology Workgroup to find effective, cost-efficient methods for treating PFAS in leachate and groundwater, continue statewide sampling, and require response activities as appropriate. See: https://www.michigan.gov/pfasresponse/workgroups/landfills. (Interestingly, Illinois' proposed standards for PFOA and PFOS are twice as stringent as those proposed by Michigan.)

Likewise, as of January 2023 Pennsylvania set an MCL for drinking water that is 14 ppt for PFOA and an MCL of 18 ppt for PFOS – again, significantly higher than Illinois. Additionally, before adopting the new MCL criteria, Pennsylvania Department of Environmental Protection considered numerous factors and "[c]onducted a cost to benefit analysis" to support the statewide standard. See: https://www.dep.pa.gov/Citizens/My-Water/drinking_water/PFAS/Pages/DEP-Involvement.aspx

While the federal strategy is comprehensive and across media boundaries, the Illinois EPA's focus has been myopic. In support of its proposal the Illinois EPA did a study of drinking water from all Public Water Supply ("PWSs") in Illinois and, instead of applying a standard to

[1] The most recent federal strategy can be found at: https://www.epa.gov/environmental-topics/water-topics
See also Exhibit B (downloaded on March 2, 2023)

PWSs, it used the information collected as justification for the proposed extremely stringent groundwater GQSs – applicable to *all* categories of groundwater – failing to even identify which groundwaters serve as sources of public drinking water.

As referenced above, the Illinois EPA proposal also stands out in comparison to the approaches being proposed and adopted in other states[2] – as being more stringent – and as paying no attention to feasibility or cost. To summarize this vast array of approaches, most focus on actual drinking water from the tap; those that create groundwater standards appear to do so paying attention to risk (identifying those groundwaters that are the source of drinking water) and associated costs. Most of the states have begun to develop more holistic approaches to the problem and are working with stakeholders to adopt voluntary monitoring programs that will be used to develop sensible regulatory approaches.

As to the standards proposed by Illinois EPA in this rulemaking, in comparison to Exhibit C, it is easy to conclude that Illinois' proposal is much more stringent than the other states – making these standards virtually impossible to meet. Further, it would be unreasonable and arbitrary for Illinois to adopt groundwater standards that are stricter than federal USEPA guidance for drinking water standards – but that is what is being proposed.

NWRA does not intend in this public comment to address the toxicological analysis that led to this proposal; the record is nonetheless replete with information from the other participants that should provide sufficient rationale for the Board to question the basis for the Illinois EPA's quantitative analysis and proposed standards.

IV. The Illinois EPA refuses to address how these GQSs might be applied in other regulatory programs, yet it intends immediate enforceability in relevant permits and, based upon current practice under Parts 807 and 811 (landfill rules), NWRA

[2] The most recent summary of State actions can be found at: https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024. See also Exhibit C (downloaded on March 2, 2023)

seeks to have these new standards not applicable to these regulations unless and until Board holds hearing to address changes to those programs.

The Illinois EPA proposal and associated justification and testimony here leaves the regulated community, especially the waste industry, with many unanswered questions as to how compliance can reasonably be achieved in the context of the many obligations contained in the Board's landfill rules that require adherence, in one fashion or another, to the Board's Part 620 rules. NWRA would ask that the Board consider closely the concerns raised by the testimony of NWRA representatives Tom Hilbert and Eric Ballenger – and, at the very least, open a docket to modify the State's landfill rules prior to proceeding forward with these proposed standards as applicable to landfills.

As just one – important – example, NRWA provided testimony as to concerns over implementation of the landfill modelling requirements, known as the Groundwater Impact Assessment ("GIA"). These modelling requirements are applicable to all Part 811 landfills, yet they not required federally – nor do other states require them. From the waste industry's experience, the GIA is wholly unnecessary and not a valid indicator of actual environmental risk. Given the Illinois EPA's implementation of the GIA provisions requires the contaminant transport model to presume the most conservative input parameters (i.e., provide the highest predicted model concentration), the landfill industry has significant reason to believe that the GIA model will fail when inputting the PFAS compounds – and will not be an accurate predictor of PFAS contamination from leachate. A failed GIA model will potentially halt development of new or expanded landfills – and may have other adverse permit repercussions. (See Dec. 6, 2022, Eric Ballenger Testimony, NWRA)

A lesser but equally important concern is the lack of confidence that monitoring will actually be detecting PFAS from leachate – as opposed from some other source, such as the

groundwater sampling instruments and/or well infrastructure itself. Further, the waste industry is not confident that the newly proposed laboratory testing requirements, designed for assessing drinking water, are an appropriate change as to how landfills (and their associated laboratory partners) have historically tested groundwater. As stated earlier in this comment, previous groundwater rulemakings have considered relatively simple additions of constituents. Unlike PFAS, those constituents were not pervasive in the waste stream. Further, in no prior groundwater rulemaking was the Board asked to adopt standards in the parts per trillion, nor was it asked to adopt new and different analytical methods to detect to those levels. The addition of new constituents at a standard that is 1000 lower than any existing standard adds complexities that must be given significant consideration. (See Dec. 6, 2022, Thomas Hilbert Testimony, NWRA)

V. Conclusion

This record is not supported as to cost or feasibility of achieving the GQSs proposed here. Neither is it supported by the public health need for such stringent standards, especially in light of different standards being proposed and considered federally and in other states. The Illinois EPA's proposal ignores the obligations set forth by the legislature that, in adopting regulations, Illinois must consider the cost and feasibility of achieving the proposed regulations.

The Board must realize that PFAS regulation cannot reasonably be treated as business as usual. Given the lack of supporting justification for the proposed standards, the Illinois EPA's failure to address other Board regulatory programs that require adherence to GQSs, and the developing federal and state approaches that are inconsistent with the Illinois EPA proposal, the Board should dismiss this rulemaking as lacking sufficient justification to move forward to First Notice. Instead, the Board should wait for the federal government to implement federal action

and/or the State legislature to provide a consistent regulatory direction, as occurred with the State's new Coal Combustion Residual ("CCR") rules. See R14-10, Dismissal Order, September 19, 2019; R.20-19, Final Order Adopting CCR rules, April 15, 2021.

By /s/ Claire A. Manning

BROWN, HAY & STEPHENS, LLP
Claire A. Manning
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com

SORLING NORTHRUP
James M. Morphew
1 North Old State Capitol Plaza
Suite 200
P.O. Box 5131
Springfield, IL 62705
jmmorphew@sorlinglaw.com

CERTIFICATE OF SERVICE

I, the undersigned, certify that on this 3rd day of March 2023, I electronically served the **NATIONAL WASTE & RECYCLING ASSOCIATION'S PUBLIC COMMENT** upon the individuals on the attached service list. I further certify that my email address is cmanning@bhslaw.com.

Dated: March 3, 2023

By /s/ Claire A. Manning

BROWN, HAY & STEPHENS, LLP
Claire A. Manning
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com

SERVICE LIST	
Don Brown, Clerk of the Board Don.brown@illinois.gov Vanessa Horton, Hearing Officer Vanessa.Horton@Illinois.gov Chloe Salk, Hearing Officer Chloe.Salk@Illinois.gov **Illinois Pollution Control Board** James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601	Sara Terranova, Assistant Counsel sara.terranova@illinois.gov Nicholas E. Kondelis, Assistant Counsel Nicholas.E.Kondelis@Illinois.gov **Illinois Environmental Protection Agency** 1021 North Grand Avenue East PO Box 19276 Springfield, Illinois 62794
Jorge T. Mihalopoulos, Head Assistant Attorney jorge.mihalopoulos@mwrd.org Susan T. Morakalis, General Counsel morakaliss@mwrd.org J. Mark Powell, Senior Attorney PowellJ@mwrd.org **Metropolitan Water Reclamation District of Greater Chicago** 100 E. Erie Street Chicago, Illinois 60611	Renee Snow, General Counsel renee.snow@illinois.gov **Illinois Department of Natural Resources** One Natural Resources Way Springfield, Illinois 62702
Ellen F. O'Laughlin, Assistant Attorney General Ellen.Olaughlin@ilag.gov Jason James, Assistant Attorney General Jason.James@ilag.gov **Office of the Illinois Attorney General** 69 West Washington Street Suite 1800 Chicago, IL 60602	Melissa S. Brown Melissa.Brown@heplerbroom.com **Illinois Environmental Regulatory Group** 4340 Acer Grove Drive Springfield, IL 62711
Stephen P. Risotto - Senior Director, CPT srisotto@americanchemistry.com Aleacia Chinkhota aleacia_chinkhota@americanchemistry.com **American Chemistry Council** 700 2nd Street, NE Washington, DC 20002	Fredric P. Andes fandes@btlaw.com **Barnes & Thornburg LLP** 1 North Wacker Drive Suite 4400 Chicago, IL 60606

Nessa Coppinger ncoppinger@bdlaw.com Daniel Schulson dschulson@bdlaw.com Matthew Schneider mschneider@bdlaw.com **Beveridge & Diamond, PC** 1900 N. St. NW Washington, DC 20036	PSandra Carey - HSE Executive sandracarey@imoa.info **International Molybdenum Association** 454-458 Chiswick High Road London, W4 5TT, United Kingdom
Joshua R. More Joshua.More@afslaw.com Bina Joshi Bina.Joshi@afslaw.com Sarah L. Lode sarah.lode@afslaw.com Daniel J. Deeb Dan.Deeb@afslaw.com Alex Garel-Frantzen Alex.Garel-Frantzen@afslaw.com **ArentFox Schiff LLP** 233 South Wacker Drive, Suite 7100 Chicago, IL 60606	

February 18, 2021

IPCB 2022-0018

Proposed Amendments to Groundwater 35 Ill. Adm Code 620

The Illinois Groundwater Advisory Council (GAC) submits these 35Ill Ad. Code 620 Groundwater Rule recommendations to the IL Pollution Control Board (Board) for their review and comment.

The GAC was established as part of the statuary requirements in the Illinois Groundwater Protection Act. In proposed rules pertaining to Illinois groundwater protection issues, the GAC submits recommendations to the Intergovernmental Coordinating Committee on Groundwater (ICCG) for review, who then in turn reviews and provides comment prior to submittal to the Illinois EPA (IEPA) prior to proposed rule going to the Board.

On September 19, 2021, the GAC provided their recommendations for review to the ICCG. A copy was also sent to the IEPA. (copy attached)

On October 14, 2021, the ICCG responded to both the GAC and IEPA, with neither an endorsement or disapproval of the recommendations or proposed rule, with no further issues to raise.

On November 18, 2021, the IEPA notified the GAC that each of their applicable point of concern has been sufficiently addressed in the Statement of Reasons and accompanied Testimony that was to be filed before the IPCB.

In the GAC's review of the IEPA's filing to the Board, we were unable to find any specific responses to our questions/concerns that we felt were needed to make the final rule a more reasonable and workable rule for all impacted parties to work with.

As a result, we are submitting these recommendations for your review and response during this rulemaking.

Thank you,

Robert Elvert

Chairman, Illinois Groundwater Advisory Council

EXHIBIT A

GAC RECOMMENDATIONS TO PROPOSED 35 Ill. 35Adm. CODE 620

The Illinois Advisory Council (GAC) held meetings on June 16, 2021, July 19, 2021, and August 25, 2021, in part to discuss the Illinois Environmental Protection Agency's (Illinois EPA) current draft Part 620 rulemaking proposal and public comments regarding the same. The Illinois EPA has expressed an urgency to file these proposed rules with the Illinois Pollution Control Board (IPCB), but has provided no specific reason for the urgency other than it being over 12 years since Part 620's last update

After the three GAC meetings referenced above and reviewing public comments submitted before the May 25th deadline, the GAC believes the Illinois EPA has not yet provided the following information:

1. A description of the basis for the Illinois EPA's reluctance to work with all impacted parties during the drafting of these rules, which could have resulted in discussions answering many of the questions raised during the comment period that ended May 25, 2021. Per the 12/17/20 GAC remote meeting call, the Illinois EPA Agency had already started working on the draft proposal.
2. A description of the basis for the Agency's urgency to file these proposed rules with the IPCB without prior response to all comments submitted during the comment period that ended May 25, 2021.
3. A description of the basis for not following the federal or surrounding state approaches, methodologies, and standards.
4. A description of the basis for justifying Illinois standards to be more stringent than federal and/or surrounding state approaches, as well as why the Illinois EPA seeking to revise these standards before the US EPA has updated their federal standards?
5. A description of how testing will be performed in state laboratories at the levels recommended in the proposal, including calculation assumptions and technical research references.
6. A description of the methods regulated entities should use to analyze for per/polyfluoroalkyl (PFA's) substances and other materials in wastewater, biosolids, and other products.
7. A description of state and/or federal resources available for regulated entities to treat to the proposed standards.

Based upon Illinois EPA statements at the August 25th meeting that they would not provide responses to raised nor previously submitted questions prior to proposing the amendments to the IPCB, the GAC will not have the benefit of knowing the Illinois EPA's responses and/or how it might revise the proposal. As a result, the GAC cannot offer a recommendation that the Illinois EPA move forward in this filing. Should the Illinois EPA continue to move forward with the proposal, it is the GAC's position that the Illinois EPA sufficiently address these questions in

EXHIBIT A

the Proposed Rulemaking and/or Statement of Reasons to provide the most robust and transparent proposal to the Illinois Pollution Control Board for a more effective and workable standard.

September __ 2021

Bob Elvert – Chair

John Liberg

Lauren Lurkins

Monica Rios

Dawn Walker

Pius Weibel

EXHIBIT A

PFOA, PFOS and Other PFAS

CONTACT US <https://epa.gov/pfas/forms/contact-us-about-pfoa-pfos-and-other-pfas>

PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024

Lea en español

Infórmese acerca del Mapa estratégico sobre PFAS: Los compromisos de la EPA para tomar acción en 2021-2024 <https://espanol.epa.gov/espanol/mapa-estrategico-sobre-pfas-compromisos-de-la-epa-para-tomar-medidas-en-2021-2024>

On October 18, 2021, EPA Administrator Michael S. Regan announced the Agency's PFAS Strategic Roadmap—laying out a whole-of-agency approach to addressing PFAS.

The roadmap sets timelines by which EPA plans to take specific actions and commits to bolder new policies to safeguard public health, protect the environment, and hold polluters accountable. The actions described in the PFAS Roadmap each represent important and meaningful steps to safeguard communities from PFAS contamination. Cumulatively, these actions will build upon one another and lead to more enduring and protective solutions.

- Read EPA's one-year progress report on its work under the PFAS Strategic Roadmap: EPA's PFAS Strategic Roadmap: A Year of Progress (pdf) <https://epa.gov/system/files/documents/2022-11/pfas%20roadmap%20progress%20report_final_nov%2017.pdf> (3.33 MB, November 2022)
- Read an overview of the PFAS Strategic Roadmap and learn more about key actions below, or read the complete PFAS Strategic Roadmap (pdf) <https://epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf> (1.46 MB) .
- Learn about EPA actions and accomplishments since January 20, 2021. <https://epa.gov/pfas/key-epa-actions-address-pfas>
- View the slides from EPA-hosted webinars: Webinar: PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024 (pdf) <https://epa.gov/system/files/documents/2021-10/slides-epa-pfas-roadmap-public-webinars.pdf> (864.63 KB, October 2021)

On this page:

EPA Council on PFAS

EPA Administrator Michael Regan established the EPA Council on PFAS in April 2021 and charged it to develop a bold, strategic, whole-of-EPA strategy to protect public health and the environment from the impacts of PFAS.

- The PFAS Council developed the PFAS Strategic Roadmap to lay out EPA's whole-of-agency approach to tackling PFAS and set timelines by which the Agency plans to take concrete actions during the first term of the Biden-Harris Administration to deliver results for the American people.
- The Council is comprised of senior technical and policy leaders from across EPA program offices and Regions and is chaired by Assistant Administrator for Water Radhika Fox and Acting Region 1 Administrator Deb Szaro.

EPA's Approach

EPA's approach is shaped by the unique challenges posed by PFAS contamination. EPA cannot solve the problem of "forever chemicals" by tackling one route of exposure or one use at a time. Rather, the EPA needs to use every tool in its tool box. Our approach is centered on the following principles:

Consider the Lifecycle of PFAS

EPA will account for the full lifecycle of PFAS, their unique properties, the ubiquity of their uses, and the multiple pathways for exposure.

Get Upstream of the Problem

EPA will bring deeper focus to preventing PFAS from entering the environment in the first place—a foundational step to reducing the exposure and potential risks of future PFAS contamination.

Hold Polluters Accountable

EPA will seek to hold polluters and other responsible parties accountable for their actions and for PFAS remediation efforts.

Ensure Science-Based Decision-Making

EPA will invest in scientific research to fill gaps in understanding of PFAS, to identify which additional PFAS may pose human health and ecological risks at which exposure levels, and to develop methods to test, measure, remove, and destroy them.

Prioritize Protection of Disadvantaged Communities

When taking action on PFAS, EPA will ensure that disadvantaged communities have equitable access to solutions.

Engagement

As EPA takes the actions outlined in the roadmap, the Agency is committed to transparent, equitable, and inclusive engagement with all stakeholders to inform our work.

With the release of the roadmap, EPA began a national engagement effort as it seeks to partner for progress on PFAS. This effort includes:

- **Regional community engagement.** Alongside the release of EPA's one-year PFAS Roadmap progress report in November 2022, EPA announced plans to hold virtual community engagement events in 2023. EPA plans to hold a session focused on each EPA Region as well as a specific session for Tribal partners. As EPA works to identify specific dates and times for each session, please use the link below to sign up to receive more information.
  - NEW February 2023: EPA has begun to announce specific dates and times for virtual engagement sessions, with additional dates and times to be announced soon.
  - Learn more about virtual PFAS engagement sessions or register to attend. <https://pfascommunityengagement.org/>
- **National webinars**. In October and November 2021, EPA held national public webinars to share the strategic roadmap and the actions EPA has announced.
  - View the slides from EPA-hosted webinars: Webinar: PFAS Strategic Roadmap: EPA's Commitments to Action 2021-2024 (pdf) <https://epa.gov/system/files/documents/2021-10/slides-epa-pfas-roadmap-public-webinars.pdf> (864.63 KB, October 2021)
- **Stakeholder listening sessions.** EPA held a series of stakeholder briefings with non-governmental organizations; Congressional stakeholders; Federal agency partners; Tribal, state and local governments; environmental justice organizations; and industry groups. EPA will continue to engage with stakeholders as the Agency moves ahead with the actions in the roadmap.

- **A focus on impacted communities.** As outlined in the roadmap, EPA will also engage directly with affected communities in every EPA Region to hear how PFAS contamination impacts their lives and livelihoods, building on a recommendation from EPA's National Environmental Justice Advisory Council.

Goals

EPA's integrated approach to PFAS is focused on three central directives:

1. **Research.** Invest in research, development, and innovation to increase understanding of PFAS exposures and toxicities, human health and ecological effects, and effective interventions that incorporate the best available science.
2. **Restrict.** Pursue a comprehensive approach to proactively prevent PFAS from entering air, land, and water at levels that can adversely impact human health and the environment.
3. **Remediate.** Broaden and accelerate the cleanup of PFAS contamination to protect human health and ecological systems.

Key Actions

Each of the actions described in the roadmap is an important and meaningful step to safeguard communities from PFAS contamination. The risks posed by PFAS, however, demand that the Agency attack the problem on multiple fronts at the same time and leverage the full range of EPA's statutory authorities to confront the human health and ecological risks of PFAS. Cumulatively, these actions will build upon one another and lead to more enduring and protective solutions. As outlined in greater detail in the PFAS Strategic Roadmap (pdf) <https://epa.gov/system/files/documents/2021-10/pfas-roadmap_final-508.pdf> (1.46 MB) , EPA will be taking the following key actions:

Office of Chemical Safety and Pollution Prevention

- Publish a national PFAS testing strategy to deepen understanding of the impacts of categories of PFAS, including potential hazards to human health and the environment. ***(National Testing Strategy released October 2021*** *<https://epa.gov/assessing-and-managing-chemicals-under-tsca/national-pfas-testing-strategy>****)***

- Ensure a robust review process for new PFAS under the Toxic Substances Control Act to ensure these substances are safe before they enter commerce.
- Review existing PFAS under TSCA to ensure existing PFAS are being used in ways that do not present concerns, and to prevent resumed production of legacy PFAS or their use in new ways. **(*Inactive PFAS proposed rule published January 2023* <*https://epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-and-polyfluoroalkyl-substances-pfas*>)**
- Enhance PFAS reporting under the Toxics Release Inventory by proposing a rulemaking to remove exemptions and exclusions for toxic chemical reporting. **(*Proposed rule published December 2022* <*https://epa.gov/toxics-release-inventory-tri-program/changes-tri-reporting-requirements-and-polyfluoroalkyl*>)**
- Finalize new PFAS reporting under TSCA Section 8 to better characterize the sources and quantities of manufactured PFAS in the United States.

Office of Water

- Undertake nationwide monitoring for PFAS in drinking water under the fifth Unregulated Contaminant Monitoring Rule, significantly expanding the number of drinking water systems participating in the program, pending sufficient appropriations by Congress. ***(final rule published December 2021*** <*https://epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule*>***)***
- Establish a national primary drinking water regulation for PFOA and PFOS that would set enforceable limits and require monitoring of public water supplies, while evaluating additional PFAS and groups of PFAS.
- Publish the final toxicity assessment for GenX and five additional PFAS—PFBA, PFHxA, PFHxS, PFNA, and PFDA—to better understand their human health and environmental effects. ***(final GenX assessment published October 2021*** <*https://epa.gov/chemical-research/human-health-toxicity-assessments-genx-chemicals*>***)***
- Publish health advisories for GenX and PFBS based on final toxicity assessments to enable tribes, states, and local governments to inform the public and take appropriate action. ***(final health advisories published June 2022*** <*https://epa.gov/sdwa/drinking-water-health-advisories-genx-chemicals-and-pfbs*>***)***
- Restrict PFAS discharges from industrial sources through a multi-faceted Effluent Limitations Guidelines program to proactively establish national technology-based regulatory limits, including progress on the nine industrial categories in the proposed PFAS Action Act of 2021.

- Leverage National Pollutant Discharge Elimination System permitting to reduce PFAS discharges to waterways to reduce discharges of PFAS at the source and obtain more comprehensive information through monitoring on the sources of PFAS and quantity of PFAS discharged by these sources. ***(memo issued to EPA Regional permitting and pretreatment authorities in April 2022*** *<https://epa.gov/newsreleases/epa-delivers-three-water-commitments-agencys-pfas-strategic-roadmap>****)***
- Publish improved analytical methods to enable 40 PFAS to be monitored in eight different environmental matrices, and to update methods for drinking-water monitoring.
- Publish final recommended ambient water quality criteria for PFAS for aquatic life and human health to help Tribes and states develop standards, write permits, and assess cumulative impacts. ***(draft recommended criteria published in April 2022 for PFOA and PFOS*** *<https://epa.gov/newsreleases/epa-delivers-three-water-commitments-agencys-pfas-strategic-roadmap>****)***
- Enhance data availability on PFAS in fish tissue to better assess the impacts of PFAS on the aquatic environment and to inform federal, state, and Tribal efforts to set PFAS fish advisories.
- Finalize risk assessment for PFOA and PFOS in biosolids that will serve as the basis for determining whether regulation of PFOA and PFOS in biosolids is appropriate.

Office of Land and Emergency Management

- Propose to designate certain PFAS as CERCLA hazardous substances to require reporting of PFOA and PFAS releases, enhance the availability of data, and ensure agencies can recover cleanup costs. ***(proposed rule published September 2022*** *<https://epa.gov/superfund/proposed-designation-perfluorooctanoic-acid-pfoa-and-perfluorooctanesulfonic-acid-pfos>****)***
- Issue advance notice of proposed rulemaking on various PFAS under CERCLA to seek public input on whether to similarly seek CERCLA designation of other PFAS.
- Issue updated guidance on destroying and disposing PFAS to reflect public comments on interim guidance and to reflect newly published research results.
- Initiate two rulemakings under the Resource Conservation and Recovery Act to address PFAS. ***(read the news release*** *<https://epa.gov/newsreleases/epa-responds-new-mexico-governor-and-acts-address-pfas-under-hazardous-waste-law>****)***

Office of Air and Radiation

- Build the technical foundation to address PFAS air emissions to identify sources, develop and finalize monitoring approaches for stack emissions and ambient air, develop information on cost-effective mitigation technologies, and increase understanding of the fate and transport of PFAS air emissions—to inform potential regulatory and non-regulatory mitigation options.

Office of Research and Development

- Develop and validate methods to detect and measure PFAS in the environment, including additional targeted methods for detecting and measuring specific PFAS, non-targeted methods for identifying unknown PFAS in the environment, and exploring "total PFAS" methods.
- Advance the science to assess human health and environmental risks from PFAS by developing human health toxicity assessments under EPA's Integrated Risk Information System program; by compiling and summarizing available and relevant scientific information; by identifying PFAS sources, transport, and exposure pathways; and by characterizing how exposure to PFAS may contribute to cumulative impacts on communities.
- Evaluate and develop technologies for reducing PFAS in the environment to inform decisions on drinking water and wastewater treatment, contaminated site cleanup and remediation, air emission controls, and end-of-life materials management.

Cross-Program

- Engage directly with affected communities in every EPA region to hear how PFAS contamination impacts their lives and livelihoods, building on a recommendation from EPA's National Environmental Justice Advisory Council. ***(virtual engagement sessions to occur in early 2023)***
- Use enforcement tools to better identify and address PFAS releases at facilities, as appropriate, to require actions by responsible parties, to limit future releases, and to address existing contamination.
- Accelerate public health protections by identifying PFAS categories—based on toxicological data for hazard assessment and decision-making, and based on removal technologies.

- Establish a PFAS Voluntary Stewardship Program to challenge industry to go above and beyond regulatory or compliance requirements to reduce overall releases of PFAS into the environment.
- Educate the public about the risks of PFAS to help the public understand what PFAS are, how they are used, and how they can impact their health.
- Issue an annual public report on progress towards PFAS commitments included in this roadmap, as well as future actions the Agency may take. ***(first annual progress report issues November 2022)***

PFAS Home <https://epa.gov/pfas>

PFAS Explained <https://epa.gov/pfas/pfas-explained>

EPA actions to address PFAS <https://epa.gov/pfas/key-epa-actions-address-pfas>

PFAS Strategic Roadmap

Data and Tools <https://epa.gov/pfas/pfas-resources-data-and-tools>

State Information <https://epa.gov/pfas/us-state-resources-about-pfas>

Contact Us <https://epa.gov/pfas/forms/contact-us-about-pfoa-pfos-and-other-pfas> to ask a question, provide feedback, or report a problem.

LAST UPDATED ON FEBRUARY 13, 2023

PFAS Fact Sheets

This page includes links for the ITRC PFAS fact sheets. The fact sheets are available as PDF files. Several tables of supporting information are published separately so that they can be updated periodically by ITRC. The fact sheet user should visit this page to access the current versions of the files.

The references list and an acronyms list are available on the website.

- Naming Conventions (published July 2022)
- Regulations (published July 2022)
    - PFAS Water and Soil Values Table Excel file– (updated January 2023)
        - The Water Table includes the available PFAS water values established by the USEPA, each pertinent state, or country (Australia, Canada and Western European countries)
        - The Soil Table includes the available PFAS soil values established by the USEPA, each pertinent state, or country (Australia, Canada and Western European countries)
    - Basis for PFOA and PFOS Values Tables Excel file (updated March 2020)
        - The PFOA Table summarizes the differences in the PFOA values for drinking water in the United States.
        - The PFOS Table summarizes the differences in the PFOS values for drinking water in the United States.
- History and Use (published July 2022)
- Fate and Transport and Physical and Chemical Properties (published July 2022)
    - Physical and Chemical Properties Table 4-1 for select PFAS Excel file (updated October 2021)
- Sampling Precautions and Laboratory Analytical Methods (published July 2022)
- Site Characterization and Media-Specific Occurrence (published July 2022)
- Treatment Technologies and Methods (published July 2022)
- Aqueous Film-Forming Foam (published July 2022)
- Human and Ecological Health Effects and Risk Assessment (published July 2022)
- Risk Communication (published July 2022)
- Stakeholder Perspectives (published July 2022)
- Surface Water Quality (published July 2022)
- Biosolids and Per- and Polyfluoroalkyl Substances (published October 2022)

PFAS Fact Sheets en Español

ITRC's most popular PFAS Fact Sheets are now available in Spanish! Click the links below to view the PDF files.

- Naming Conventions (Published August 2022)
- Regulations (Published August 2022)
- History and Use (Published July 2022)
- Fate and Transport and Physical and Chemical Properties (Published July 2022)
- Sampling Precautions and Laboratory Analytical Methods (Published July 2022)
- Site Characterization and Media-Specific Occurrence (Published July 2022)
- Treatment Technologies and Methods (Published April 2022)
- Aqueous Film-Forming Foam (Published April 2022)
- Human and Ecological Health Effects and Risk Assessment (Published April 2022)
- Risk Communication (Published April 2022)
- Stakeholder Perspectives (Published April 2022)

EXHIBIT C

PFAS Fact Sheets em Português

ITRC's most popular PFAS Fact Sheets are now available in Portuguese! Click the links below to view the PDF files.

- Naming Conventions (Published January 2023)
- Regulations (Published January 2023)
- History and Use (Published January 2023)
- Fate and Transport and Physical and Chemical Properties (Published January 2023)
- Sampling Precautions and Laboratory Analytical Methods (Published January 2023)

PFAS Explainer Videos

The PFAS Team developed brief explainer videos to accompany the fact sheets. The following links will redirect you to ITRC's PFAS Explainer Videos on YouTube:

- ITRC PFAS Team Introduction
- PFAS Naming Conventions
- PFAS History and Use
- PFAS Fate and Transport
- PFAS Remediation
- PFAS Lab Analytical Methods
- Aqueous Film Forming Foam

Updated July 2022

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EXHIBIT C