



# ENVIRONMENTAL REGISTER

October 15, 2021 – Number 759

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A PUBLICATION OF THE ILLINOIS POLLUTION CONTROL BOARD

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<https://pcb.illinois.gov/>

## BOARD MEMBERS

- ❖ Barbara Flynn Currie, Chair
- ❖ Cynthia M. Santos
- ❖ Anastasia Palivos
- ❖ Jennifer Van Wie

The **Illinois Pollution Control Board** is an independent, five-member board that adopts environmental control regulations and decides enforcement actions and other environmental cases for the State of Illinois.

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## CHAIR'S UPDATE

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In this issue, I am pleased to share information on the Board's recent and upcoming rulemaking hearings. Twenty-seven rulemakings are pending before the Board. Since the last issue of the *Environmental Register*, published on July 20, 2021, the Board has held five rulemaking hearings. Three more rulemaking hearings are scheduled for next month.

The Board conducted two hearings in a rulemaking captioned Drycleaner Environmental Response Trust Fund Act Proposal to Add 35 Ill. Adm. Code Part 1501, Repeal 35 Ill. Adm. Code Part 1500, and Repeal 2 Ill. Adm. Code Part 3100, [docket R21-19](#). The Board held the first hearing in Springfield on September 9, 2021, and the second hearing in Chicago on October 7, 2021. The Illinois Environmental Protection Agency (IEPA) filed this rulemaking proposal on February 9, 2021, to effectuate amendments to the Drycleaner Environmental Response Trust Fund Act or "DERT Fund Act" (415 ILCS 135). Those statutory amendments transferred responsibilities—such as administering the DERT Fund—from the Drycleaner Environmental Response Trust Fund Council to IEPA.

Additionally, the Board held three rulemaking hearings in Chicago on October 12, 2021, as part of its regulatory-review initiative—an undertaking to update, streamline, and clarify the Board's rules across multiple media and subject areas. The three hearings concerned proposed non-substantive amendments to regulations on public water supplies (Amendments to 35 Ill. Adm. Code Subtitle F: Public Water Supply, [docket R18-26](#)), atomic radiation (Amendments to 35 Ill. Adm. Code Subtitle I: Atomic Radiation, [docket R18-28](#)), and agriculture-related pollution (Amendments to 35 Ill. Adm. Code Subtitle E: Agriculture Related Pollution, [docket R18-25](#)). Three more hearings are set for November 17, 2021, in Springfield.

Through this regulatory-review initiative, the Board has already completed seven rulemakings, adopting final amendments to its regulations on noise, potentially infectious medical waste, right-to-know standards, and mine-related water pollution, as well as its procedural rules. The amendments removed unnecessary language, replaced outdated text, updated statutory references, and reorganized provisions for clarity. Also, under the initiative, rulemakings are pending to non-substantively amend the Board's regulations on air pollution, water pollution, and waste disposal.

You can find information concerning all the Board's pending rulemakings at <https://pcb.illinois.gov/>.

Sincerely,



Barbara Flynn Currie  
Chair



# RULEMAKING UPDATE

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## **Board Proposes Non-Substantive Amendments to Agriculture-Related Pollution Rules**

On July 29, 2021, the Board proposed, for public comment, non-substantive amendments to its regulations concerning agriculture-related pollution. Those regulations are designed to prevent air and water pollution by requiring environmental safeguards for locating, constructing, and operating specified livestock management facilities and livestock waste-handling facilities. The proposed amendments, which include changes suggested by the Illinois Environmental Protection Agency, are part of the Board's regulatory-review initiative to ensure that its environmental regulations are current, clear, and concise.

The Board's rulemaking is captioned Amendments to 35 Ill. Adm. Code Subtitle E: Agriculture Related Pollution, docket R18-25. Here is a link to the Board's [opinion and order](#), which includes the text of the proposed amendments. For more information, please contact Mark Kaminski at [mark.kaminski@illinois.gov](mailto:mark.kaminski@illinois.gov).

## **Board Extends Deadline for Final Action on “Identical-in-Substance” Drinking Water Amendments**

On August 26, 2021, the Board issued an order addressing two “identical-in-substance” rulemaking dockets concerning Illinois' primary drinking water regulations. For docket R21-10, relating to amendments adopted by the United States Environmental Protection Agency (USEPA) during the last six months of 2020, the Board extended the due date for final Board action until March 1, 2022. Docket R22-2 concerns USEPA amendments adopted during the first six months of 2021. The Board consolidated the two dockets so that it may concurrently consider adopting amendments to Illinois' primary drinking water regulations that are identical in substance to USEPA's amendments from that 12-month period.

The Board's consolidated rulemaking is captioned SDWA Update, USEPA Amendments (July 1, 2020 through December 31, 2020) and SDWA Update, USEPA Amendments (January 1, 2021 through June 30, 2021), dockets R21-10 and R22-2 (consol.). Here is a link to the Board's August 26, 2021 [order](#). For more information, please contact Michael McCambridge at [michael.mccambridge@illinois.gov](mailto:michael.mccambridge@illinois.gov).

## **Board Accepts IERG's Air Rulemaking Proposal for Hearing**

On September 9, 2021, the Board accepted for hearing a rulemaking proposal filed by the Illinois Environmental Regulatory Group (IERG). IERG proposes that the Board amend Part 203 (Major Stationary Sources Construction and Modification), Part 204 (Prevention of Significant Deterioration), and Part 232 (Toxic Air Contaminants) of its air pollution regulations (35 Ill. Adm. Code 203, 204, 232). IERG maintains that its proposed amendments are necessary to make the Board's Nonattainment New Source Review rules current and consistent with the Clean Air Act and implementing federal regulations.



The Board's rulemaking is captioned Amendments to 35 Ill. Adm. Code Part 203: Major Stationary Sources Construction and Modification, 35 Ill. Adm. Code Part 204: Prevention of Significant Deterioration, and Part 232: Toxic Air Contaminants, docket R22-17. Here is a link to the Board's September 9, 2021 [order](#). For more information, please contact Daniel Pauley at [daniel.pauley@illinois.gov](mailto:daniel.pauley@illinois.gov).



# BOARD ACTIONS

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**July 8, 2021 Regular Meeting**

**By videoconference: IPCB Offices in Chicago and Springfield**

## ADJUSTED STANDARDS

[AS 19-2](#) Petition of Emerald Polymer Additives, LLC for an Adjusted Standard from 35 Ill. Adm. Code 304.122(b) (Water) – The Board denied Emerald Polymer Additives’ petition for an adjusted standard from the Board’s total ammonia nitrogen effluent limit.

## ADMINISTRATIVE CITATIONS

[AC 21-7](#) County of LaSalle v. Jake Cook and Sarah Cook (Land) – After the Cooks failed to timely file a petition to contest the County of LaSalle’s administrative citation, the Board found that the Cooks violated Section 21(p)(1) and (p)(7) of the Environmental Protection Act (415 ILCS 5/21(p)(1), (p)(7) (2018)), as alleged. Because there were two violations of Section 21(p), the Board ordered the Cooks to pay a total civil penalty of \$3,000, reflecting the statutory penalty of \$1,500 per violation.

## ADJUDICATORY CASES

[PCB 13-15](#) Sierra Club, Environmental Law and Policy Center, Prairie Rivers Network, and Citizens Against Ruining the Environment v. Midwest Generation, LLC (Water, Land – Enforcement, Citizens) – The Board granted Midwest Generation’s motion for stay of discovery—regarding financial issues related to its parent company—until the Board decides Midwest Generation’s motion *in limine*.

[PCB 20-38](#)  
[PCB 20-39](#)  
[consol.](#) Midwest Generation, LLC (Joliet 9 Generating Station) v. Illinois Environmental Protection Agency and Midwest Generation, LLC (Joliet 29 Generating Station) v. Illinois Environmental Protection Agency (Thermal Demonstration) – The Board granted Midwest Generation’s petition for alternative thermal effluent limitations.

[PCB 20-56](#) Steve and Jarilyn Stavropoulos v. Illinois Environmental Protection Agency (UST Appeal) – The Board granted the Stavropoulos’ motion for voluntary dismissal.



- PCB 21-39** People of the State of Illinois v. Buening Implement, Inc. (Land – Enforcement) – In this enforcement action concerning an Effingham County facility, the Board granted relief from the hearing requirement of Section 31(c)(1) of the Environmental Protection Act (415 ILCS 5/31(c)(1) (2018)), accepted a stipulation and proposed settlement, and ordered Buening Implement to pay a \$21,000 civil penalty and to cease and desist from further violations.
- PCB 21-106** People of the State of Illinois v. Kness Trucking, Inc. (Water, NPDES – Enforcement) – In this enforcement action concerning a Carroll County facility, the Board granted relief from the hearing requirement of Section 31(c)(1) of the Environmental Protection Act (415 ILCS 5/31(c)(1) (2018)), accepted a stipulation and proposed settlement, and ordered Kness Trucking to pay a \$9,000 civil penalty and to cease and desist from further violations.
- PCB 21-107** People of the State of Illinois v. Village of Swansea (Water, NPDES – Enforcement) – In this enforcement action concerning a St. Clair County facility, the Board granted relief from the hearing requirement of Section 31(c)(1) of the Environmental Protection Act (415 ILCS 5/31(c)(1) (2018)), accepted a stipulation and proposed settlement, and ordered Swansea to pay a \$1,620 civil penalty and to cease and desist from further violations.
- PCB 21-116** Chad Bell v. Illinois Environmental Protection Agency (Water – Tax Certification) – The Board found and certified that Chad Bell’s specified livestock waste management facilities in Mercer County are pollution control facilities for preferential tax treatment under the Property Tax Code (35 ILCS 200/11-10 (2018)).
- PCB 21-117** People of the State of Illinois v. Rolling Meadows Shell Mart, Inc. (Air– Enforcement) – The Board accepted the People’s complaint for hearing concerning Rolling Meadows Shell Mart’s gas station in Cook County.
- PCB 21-118** People of the State of Illinois v. Beardstown Sanitary District (Water, NPDES – Enforcement) – Upon receiving a complaint, a stipulation, a proposed settlement, and an agreed motion for relief from the hearing requirement in this enforcement action involving a site in Cass County, the Board accepted the complaint and ordered publication of the required newspaper notice.
- PCB 21-119** Stephen K. Main v. Illinois Environmental Protection Agency (Water – Tax Certification) – The Board found and certified that Stephen K. Main’s specified livestock waste management facilities in Knox County are pollution control facilities for preferential tax treatment under the Property Tax Code (35 ILCS 200/11-10 (2018)).



[PCB 21-120](#) Jakobs Bros. Farms v. Illinois Environmental Protection Agency (Water – Tax Certification) – The Board found and certified that Jakobs Bros. Farms’ specified livestock waste management facilities in Whiteside County are pollution control facilities for preferential tax treatment under the Property Tax Code (35 ILCS 200/11-10 (2018)).

**July 29, 2021 Regular Meeting**

**By videoconference: IPCB Offices in Chicago and Springfield**

**RULEMAKING**

[R18-25](#) Amendments to 35 Ill. Adm. Code Subtitle E: Agriculture Related Pollution (Water) – The Board adopted a proposal for public comment in this rulemaking to amend its regulations on agriculture-related pollution.

[R22-1](#) Definition of VOM Update, USEPA Regulations (January 1, 2021 through June 30, 2021) (Air) – The Board dismissed this reserved identical-in-substance docket because the United States Environmental Protection Agency did not amend its volatile organic material (VOM) regulations during the update period of January 1, 2021 through June 30, 2021.

[R22-3](#) UIC Update, USEPA Regulations (January 1, 2021 through June 30, 2021) (Land) – The Board dismissed this reserved identical-in-substance docket because the United States Environmental Protection Agency did not amend its underground injection control (UIC) regulations during the update period of January 1, 2021 through June 30, 2021.

[R22-4](#) RCRA Subtitle D (MSWLF) Update, USEPA Regulations (January 1, 2021 through June 30, 2021) (Land) – The Board dismissed this reserved identical-in-substance docket because the United States Environmental Protection Agency did not amend its municipal solid waste landfill (MSWLF) regulations during the update period of January 1, 2021 through June 30, 2021.

[R22-5](#) RCRA Subtitle C Update, USEPA Regulations (January 1, 2021 through June 30, 2021) (Land) – The Board dismissed this reserved identical-in-substance docket because the United States Environmental Protection Agency did not amend its hazardous waste regulations during the update period of January 1, 2021 through June 30, 2021.

[R22-6](#) UST Update, USEPA Regulations (January 1, 2021 through June 30, 2021) (Land) – The Board dismissed this reserved identical-in-substance docket because the United States Environmental Protection Agency did not amend its underground storage tank (UST) regulations during the update period of January 1, 2021 through June 30, 2021.



## ADMINISTRATIVE CITATIONS

[AC 21-6](#) Illinois Environmental Protection Agency v. Barry D. Ward (Land) – After Ward failed to timely file an amended petition to contest IEPA’s administrative citation, the Board found that Ward violated Section 21(p)(1) of the Environmental Protection Act (415 ILCS 5/21(p)(1) (2020)), as alleged. Because there was one violation of Section 21(p), the Board ordered Ward to pay the statutory civil penalty of \$1,500.

## ADJUDICATORY CASES

[PCB 19-64](#) Weglarz Hotel III, L.L.C., Weglarz Hotel IV, L.L.C., and Weglarz Hotel V, L.L.C., v. The Belt Railway Company of Chicago (Noise – Enforcement, Citizens) – The Board lifted the stay of the proceeding, granted complainants’ motion to voluntarily dismiss the case without prejudice, and closed the docket.

[PCB 21-98](#) TIGER Drylac USA, Inc. v. Illinois Environmental Protection Agency (Air – Permit Appeal) – Because TIGER Drylac failed to file a petition for review during the extended appeal period, the Board dismissed the case and closed the docket.

[PCB 21-100](#) Graham Enterprise, Inc. v. Illinois Environmental Protection Agency (UST Appeal) – Because Graham Enterprise failed to file a petition for review during the extended appeal period, the Board dismissed the case and closed the docket.

[PCB 21-115](#) People of the State of Illinois v. SMR Oil Company d/b/a Sam’s Mobil (Air – Enforcement) – In this enforcement action concerning a gas station in Lake County, the Board granted relief from the hearing requirement of Section 31(c)(1) of the Environmental Protection Act (415 ILCS 5/31(c)(1) (2020)), accepted a stipulation and proposed settlement, and ordered Sam’s Mobil to pay a \$5,000 civil penalty and to cease and desist from further violations.

[PCB 22-1](#) People of the State of Illinois v. Parr Instrument Company (Land, RCRA – Enforcement) – Upon receiving a complaint, a stipulation, a proposed settlement, and an agreed motion for relief from the hearing requirement in this enforcement action involving a site in Rock Island County, the Board accepted the complaint and ordered publication of the required newspaper notice.

## August 26, 2021 Regular Meeting

By videoconference: **IPCB Offices in Chicago and Springfield**

## RULEMAKINGS

[R21-10](#)  
[R22-2](#)  
[consol.](#) SDWA Update, USEPA Regulations (July 1, 2020 through December 31, 2020) and SDWA Update, USEPA Regulations (January 1, 2021 through June 30, 2021) (Public Water Supply) – The Board consolidated these two identical-in-substance rulemaking dockets concerning Illinois’ primary drinking water regulations and extended the deadline for the Board final action to March 1, 2022.





## ADJUDICATORY CASES

- [PCB 21-110](#) CTI Development, LLC v. Illinois Environmental Protection Agency (Land – Variance) – The Board granted CTI Development’s motion for permission to file an amended petition, accepted the amended petition, and set a deadline of September 27, 2021 for IEPA to file a motion to dismiss and its recommendation.
- [PCB 21-118](#) People of the State of Illinois v. Beardstown Sanitary District (Water, NPDES – Enforcement) – In this enforcement action concerning a Cass County facility, the Board granted relief from the hearing requirement of Section 31(c)(1) of the Environmental Protection Act (415 ILCS 5/31(c)(1) (2020)), accepted a stipulation and proposed settlement, and ordered Beardstown Sanitary District to pay a \$5,670 civil penalty and to cease and desist from further violations.
- [PCB 22-2](#) People of the State of Illinois v. Wil Son Pallet LLC (Water, NPDES – Enforcement) – Upon receiving a complaint, a stipulation, a proposed settlement, and an agreed motion for relief from the hearing requirement in this enforcement action involving a site in Moultrie County, the Board accepted the complaint and ordered publication of the required newspaper notice.
- [PCB 22-3](#) Mac’s Convenience Stores, LLC v. Illinois Environmental Protection Agency (UST Appeal) – The Board granted the parties’ request to extend the appeal period to December 9, 2021.
- [PCB 22-4](#) Mac’s Convenience Stores, LLC v. Illinois Environmental Protection Agency (UST Appeal) - The Board granted the parties request to extend the appeal period to December 7, 2021.

## September 9, 2021 Regular Meeting

By videoconference: IPCB Offices in Chicago and Springfield

## RULEMAKINGS

- [R22-17](#) Amendments to 35 Ill. Adm. Code Part 203: Major Stationary Sources Construction and Modification, 35 Ill. Adm. Code Part 204: Prevention of Significant Deterioration, and Part 232: Toxic Air Contaminants (Air) – The Board granted the Illinois Environmental Regulatory Group’s motion to waive the 200-person signature requirement and accepted its rulemaking proposal for hearing.

## ADJUDICATORY CASES

- [PCB 11-50](#) People of the State of Illinois v. The City of Morris and Community Landfill Company, Inc. (Land – Enforcement) – The Board granted the People’s motion to file an amended complaint and accepted the amended complaint. The Board also granted the People’s motion to voluntarily dismiss Community Landfill Company.



**PCB 13-15** Sierra Club, Environmental Law and Policy Center, Prairie Rivers Network, and Citizens Against Ruining the Environment v. Midwest Generation (Land – Enforcement) – The Board affirmed the hearing officer’s grant of Midwest Generation’s motion *in limine*, denied the Environmental Groups’ related interlocutory appeal, and directed the hearing officer to resume discovery.

**PCB 21-47** People of the State of Illinois v. Frontier North, Inc. (Water, NPDES – Enforcement) – Upon receiving a stipulation, a proposed settlement, and an agreed motion for relief from the hearing requirement in this enforcement action involving a site in Williamson County, the Board ordered publication of the required newspaper notice.

**PCB 21-108** Midwest Generation, LLC (Will County Station) v. Illinois Environmental Protection Agency (Land – Variance) – The Board granted variance relief from specified deadlines in the standards for disposing coal combustion residuals in surface impoundments (35 Ill. Adm. Code 845), subject to enumerated conditions.

**PCB 21-109** Midwest Generation, LLC (Powerton Station) v. Illinois Environmental Protection Agency (Land – Variance) – The Board granted variance relief from specified deadlines in the standards for disposing coal combustion residuals in surface impoundments (35 Ill. Adm. Code 845), subject to enumerated conditions.

**PCB 22-1** People of the State of Illinois v. Parr Instrument Company (Land, RCRA – Enforcement) – In this enforcement action concerning a Rock Island County facility, the Board granted relief from the hearing requirement of Section 31(c)(1) of the Environmental Protection Act (415 ILCS 5/31(c)(1) (2020)), accepted a stipulation and proposed settlement, and ordered Parr Instrument to pay a \$12,000 civil penalty and to cease and desist from further violations.

## **September 23, 2021 Regular Meeting**

**By videoconference: IPCB Offices in Chicago and Springfield**

### **ADJUDICATORY CASES**

**PCB 17-11** L. E. Anderson Brothers Oil, Inc. v. Illinois Environmental Protection Agency (UST Appeal) – The Board granted Anderson Brothers’ motion for voluntary dismissal, dismissed the appeal, and closed the docket.

**PCB 17-14** William and Rita Trankina v. Illinois Environmental Protection Agency (UST Appeal) – The Board granted the Trankinas’ motion for voluntary dismissal, dismissed the appeal, and closed the docket.



**PCB 21-114** People of the State of Illinois v. Bview Corporation d/b/a Evergreen Park Citgo (Air – Enforcement) – Upon receiving a stipulation, a proposed settlement, and an agreed motion for relief from the hearing requirement in this enforcement action involving a gas station in Cook County, the Board ordered publication of the required newspaper notice.

**PCB 22-5** Koppers Inc. v. Illinois Environmental Protection Agency (Air – Permit Appeal) – The Board accepted for hearing this permit appeal involving a facility in Knox County.

**PCB 22-6** People of the State of Illinois v. Army Trail Swift Gasoline, Inc. (Air – Enforcement) – The Board accepted the People’s complaint for hearing concerning Army Trail Swift’s DuPage County facility.

**PCB 22-7** People of the State of Illinois v. Westmont Citgo, Inc. (Air – Enforcement) – The Board accepted the People’s complaint for hearing concerning Westmont Citgo’s gas station in DuPage County.



# CALENDAR

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## Thursday, October 21, 2021 (11:00 AM)

### Board meeting by videoconference

IPCB Chicago Office, 100 W. Randolph St., Room 11-512

IPCB Springfield Office, 1021 N. Grand Ave East, Room 1244 N

## Thursday, November 4, 2021 (11:00 AM)

### Board meeting by videoconference

IPCB Chicago Office, 100 W. Randolph St., Room 11-512

IPCB Springfield Office, 1021 N. Grand Ave East, Room 1244 N

## Wednesday, November 17, 2021 (9:00AM)

### Hearing: Amendments to 35 Ill. Adm. Code Subtitle E: Agriculture Related Pollution, R18-25

Sangamo Room, Illinois EPA Building

1021 North Grand Avenue East, North Entrance, Springfield

## Wednesday, November 17, 2021 (11:00AM)

### Hearing: Amendments to 35 Ill. Adm. Code Subtitle F: Public Water Supply, R18-26

Sangamo Room, Illinois EPA Building

1021 North Grand Avenue East, North Entrance, Springfield

## Wednesday, November 17, 2021 (1:00PM)

### Hearing: Amendments to 35 Ill. Adm. Code Subtitle I: Atomic Radiation, R18-28

Sangamo Room, Illinois EPA Building

1021 North Grand Avenue East, North Entrance, Springfield

## Thursday, November 18, 2021 (11:00 AM)

### Board meeting by videoconference

IPCB Chicago Office, 100 W. Randolph St., Room 11-512

IPCB Springfield Office, 1021 N. Grand Ave East, Room 1244 N

## Thursday, December 2, 2021 (11:00 AM)

### Board meeting by videoconference

IPCB Chicago Office, 100 W. Randolph St., Room 11-512

IPCB Springfield Office, 1021 N. Grand Ave East, Room 1244 N



**Thursday, December 16, 2021 (11:00 AM)**

**Board meeting by videoconference**

PCB Chicago Office, 100 W. Randolph St., Room 11-512

PCB Springfield Office, 1021 N. Grand Ave East, Room 1244 N

The events listed above are subject to change, and more events may be added. Here is a link to the [Board's current calendar](#).

**Due to the COVID-19 pandemic, there may be different ways than are customary for participating in Board hearings and meetings. Please check the Board's website (<https://pcb.illinois.gov/>) for information on how to participate in a specific hearing or meeting.**



# HEALTH ADVISORY

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
Office of Toxicity Assessment



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

JB PRITZKER, GOVERNOR

JOHN J. KIM, DIRECTOR

**HEALTH ADVISORY  
FOR  
PERFLUORONONANOIC ACID (PFNA)  
CHEMICAL ABSTRACT SERVICES REGISTRY NUMBER (CASRN)  
375-95-1**

Prepared by:  
Office of Toxicity Assessment  
Illinois Environmental Protection Agency  
July 27, 2021

### REASON FOR ACTION

As a result of a Per- and Polyfluoroalkyl Substances (PFAS) sampling initiative of community water supplies (CWS) undertaken by the Illinois Environmental Protection Agency (Illinois EPA), Perfluorononanoic Acid (PFNA) has been confirmed in a well at a CWS. In accordance with 35 Illinois Administrative Code 620.605(a), the Illinois EPA is issuing a health advisory for Perfluorononanoic Acid. Section 620.605(a) directs the Illinois EPA to issue a health advisory for a chemical substance if all of the following conditions are met:

- 1) A community water supply well is sampled, and a substance is detected and confirmed by resampling;
- 2) There is no standard under Section 620.410 for such chemical substance; and
- 3) The chemical substance is toxic or harmful to human health according to the procedures of Appendix A, B, or C.

2125 S. First Street, Champaign, IL 61820 (217) 278-5800  
1101 Eastport Plaza Dr., Suite 100, Collinsville, IL 62234 (618) 346-5120  
9511 Harrison Street, Des Plaines, IL 60016 (847) 294-4000  
595 S. State Street, Elgin, IL 60123 (847) 608-3131

2309 W. Main Street, Suite 116, Marion, IL 62959 (618) 993-7200  
412 SW Washington Street, Suite D, Peoria, IL 61602 (309) 671-3022  
4302 N. Main Street, Rockford, IL 61103 (815) 987-7760

PLEASE PRINT ON RECYCLED PAPER



The health advisory guidance level for PFNA is 0.000021 milligrams per liter (mg/L), or 21 nanograms per liter (ng/L) or parts per trillion (ppt).

The health advisory will be published in the Environmental Register (publication of the Illinois Pollution Control Board), and placed at the website: <https://pcb.illinois.gov/Resources/News>

The health advisory will also be placed on Illinois EPA's website at: <https://www2qa.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-statewide-investigation-network.aspx>

### **PURPOSE OF A HEALTH ADVISORY**

In accordance with 35 Ill. Adm. Code 620.601, the purpose of a health advisory is to provide guidance levels that, in the absence of an applicable groundwater quality standard under Section 620.410, must be considered by Illinois EPA in: 1) establishing groundwater cleanup or action levels whenever there is a release or substantial threat of a release of a hazardous substance, pesticide, or another contaminant that represents a significant hazard to public health or the environment; 2) determining whether a community water supply is taking its raw water from a site or source consistent with regulatory requirements; and 3) developing Illinois Pollution Control Board (Board) rulemaking proposals for new or revised numerical standards.

Health advisories serve as informal technical guidance, intended to provide information about contaminant exposures and potential public health impacts. The guidance level represents concentrations in drinking water at which no adverse health effects are expected to occur. Guidance levels are not enforceable or intended to be used as drinking water standards, also known as maximum contaminant levels (MCLs).

### **HEALTH ADVISORY GUIDANCE LEVEL FOR PFNA**

Through issuance of this Health Advisory, Illinois EPA is providing public notice of its guidance level for PFNA in drinking water. For non-carcinogenic health effects, the guidance level is 0.000021 milligrams per liter (mg/L), or 21 nanograms per liter (ng/L) or parts per trillion (ppt).

Section 620.605 prescribes the methods for developing health advisories for carcinogens and non-carcinogens. PFNA does not meet the definition of a carcinogen, as defined in Section 620.110; therefore, the method for developing a health advisory for non-carcinogens was used. Briefly, this method specifies that the United States Environmental Protection Agency (U.S. EPA) MCL or maximum contaminant level goal (MCLG) is the guidance level, if available, or the human threshold toxicant advisory concentration (HTTAC) must be determined using the procedures contained in Appendix A of Section 620. U.S. EPA has not published an MCL or MCLG for PFNA; therefore, Illinois EPA used the Appendix A procedures to calculate a HTTAC for PFNA.



Appendix A specifies, in prescribed order, the toxicological data to be used in developing guidance levels. To determine appropriate toxicological data in accordance with nationally accepted guidelines, pursuant to the Illinois Groundwater Protection Act (415 ILCS 55-8(a)), Illinois EPA relied upon U.S. EPA guidance titled, “*Tier 3 Toxicity Value White Paper*” (paper), dated May 16, 2013, prepared by U.S. EPA Office of Solid Waste and Emergency Response (OSWER) Human Health Regional Risk Assessors Forum. The paper lists a hierarchy of sources to be used when determining an appropriate toxicological value for use in human health assessments. The hierarchy for selection of toxicity values is as follows:

- Tier 1: U.S. EPA Integrated Risk Information System (IRIS).
- Tier 2: U.S. EPA Provisional Peer-Reviewed Toxicity Values (PPRTVs).
- Tier 3: In the order in which they are presented:
  - 1) United States Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR) Dose Minimal Risk Levels (dose MRLs).
  - 2) California EPA, Office of Environmental Health Hazard Assessment (OEHHA).
  - 3) PPRTV “Appendix” Values.
  - 4) Health Effects Assessment Summary Table (HEAST).

ATSDR is the only source with peer reviewed toxicological data within the specified hierarchy listed in the Tier 3 paper. ATSDR published a peer reviewed toxicological profile titled, “*Toxicological Profile for Perfluoroalkyls*,” for four PFAS, including PFNA, on May 5, 2021. ATSDR recommends an intermediate dose MRL equal to 0.000003 (3E-06) milligrams per kilogram per day (mg/kg-day). The value is based on a study by Das, et al., titled, “*Developmental toxicity of perfluorononanoic acid in mice*,” published in 2015. ATSDR lists the critical effects as decreased body weight and developmental delays. A pharmacokinetic (PK) model for predicting a time-weighted average (TWA) serum concentration was not identified for PFNA; therefore, an estimated TWA serum concentration, derived from measured serum concentrations, was used to calculate a human equivalency dose (HED) of 0.001 mg/kg-day, based on a no observed adverse effect level (NOAEL) of 1 mg/kg-day in mice.

A total uncertainty factor (UF) of 30 (UF of 10 to account for intrahuman variability and UF of 3 to account for toxicodynamic differences between animals and humans) was applied to the HED. In addition to the total UF of 30, ATSDR applied a modifying factor (MF) of 10 for database limitations to account for the small number of studies examining the toxicity of PFNA following intermediate-duration exposure, the limited scope of the studies, particularly the lack of immunotoxicity studies, which is a critical effect for other PFAS, and the lack of general toxicity studies. ATSDR applied a total UF/MF factor of 300 in the calculation of its dose MRL.





$$\text{dose MRL} = \frac{HED}{UF/MF}$$

$$\text{dose MRL} = \frac{0.001 \text{ mg/kg-day}}{300}$$

$$\text{dose MRL} = 0.0000033 \text{ mg/kg-day}$$

Rounded to one significant digit:

$$\text{dose MRL} = 0.000003 \text{ mg/kg-day}$$

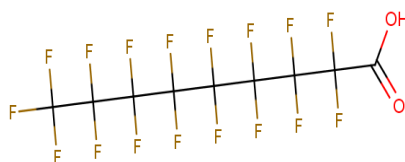
An UF of 1 may be used to extrapolate a chronic value from an intermediate (subchronic) value when developing a HED using a TWA serum concentration. Using the ATSDR dose MRL of 0.000003 (3E-06) mg/kg-day, and the procedures outlined in Section 620. Appendix A, the recommended guidance level for drinking water is 0.000021 mg/L, or 21 ng/L or ppt.

## CHEMICAL CHARACTERISTICS AND POTENTIAL ADVERSE HEALTH EFFECTS

### General Description of PFNA

Perfluorononanoic Acid (CASRN) 375-95-1, also known as heptadecafluorononanoic acid, or PFNA, is a synthetic chemical which is part of a larger class of chemicals referred to as per- and polyfluoroalkyl substances (PFAS). PFAS have been manufactured since the middle 20<sup>th</sup> Century and are known for their chemical and physical properties that impart oil and water repellency, temperature resistance, and friction reduction to a wide range of products, including, but not limited to, textile coatings, paper products, food wrappers, cosmetic and personal care products, non-stick cookware, and fire-fighting foams. PFAS are also used in the semiconductor, aerospace, oil production and mining, and metal plating industries, to name a few. PFAS enter the environment through industrial manufacturing and the use and disposal of PFAS-containing products. The chemical and physical properties of PFNA make it mobile, persistent, and bioaccumulative, meaning fish and other animals may accumulate PFNA in animal tissue when their food sources are contaminated with PFNA. PFNA is known to be persistent in the environment.

### Structural Identifier



## Chemical Identifier

C<sub>8</sub>F<sub>17</sub>COOH

### Potential Adverse Health Effects of PFNA

Limited epidemiology studies on humans suggest associations between PFNA exposure and the following possible health outcome:

- Increased serum lipids, primarily total cholesterol and LDL cholesterol

Most information regarding health effects of PFNA is derived from animal studies, primarily via the ingestion, or oral exposure, route. Laboratory studies observed the following effects in animals exposed to PFNA:

- Liver damage
- Neurodevelopmental effects
- Decreased weight of offspring

### Carcinogenic Potential

Section 620.110, defines a carcinogen as a contaminant that is classified as a Category A1 or A2 Carcinogen by the American Conference of Governmental Industrial Hygienists (ACGIH); or a Category 1 or 2A/2B Carcinogen by the World Health Organization's International Agency for Research on Cancer (IARC); or a "Human Carcinogen" or "Anticipated Human Carcinogen" by the U.S. Department of Health and Human Service National Toxicological Program (NTP); or a Category A or B1/B2 Carcinogen by the U.S. EPA in IRIS or a Final Rule issued in a Federal Register notice by the U.S. EPA. PFNA is not classified as a carcinogen by any of the above sources.



**ATTACHMENT TO HEALTH ADVISORY  
FOR  
PERFLUORONONANOIC ACID (PFNA)  
CASRN 375-95-1**

**OVERVIEW OF KEY STUDIES**

For information regarding the studies used by ATSDR for derivation of its PFNA dose MRL, refer to the Toxicological Profile for Perfluoroalkyls, located at: <https://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=1117&tid=237>

**DERIVATION OF THE HEALTH ADVISORY FOR PFNA**

The first step in the derivation of a health advisory is to determine whether the chemical substance presents a carcinogenic risk to humans. PFNA does not meet the definition of a carcinogen as specified in Section 620. Therefore, the guidance level is based on non-carcinogenic effects of this chemical.

In deriving a guidance level to protect against a health effect for which there is a threshold dose below which no damage occurs (i.e., non-carcinogen effects), Section 620.605 specifies that U.S. EPA's MCLG, if available, is the guidance level. U.S. EPA has not published a MCLG for PFNA; therefore, Illinois EPA must calculate the HTTAC as the guidance level, using the procedures specified in Appendix A of Section 620.

Appendix A specifies in subsection (a) that the HTTAC is calculated as follows:

$$HTTAC = \frac{RSC \cdot ADE}{W}$$

Where:

- HTTAC = Human threshold toxicant advisory concentration in milligrams per liter (mg/L).
- RSC = Relative source contribution, the relative contribution of the amount of exposure to a chemical via ingestion of drinking water when compared to total exposure to that chemical from all sources. Valid chemical-specific data shall be used if available. If valid chemical-specific data are not available, a value of 20% (= 0.20) must be used.
- ADE = Acceptable daily exposure of a chemical in milligrams per day (mg/d) as determined in accordance with Appendix A, subsection (b).
- W = Per capita daily water consumption equal to 2 liters per day (L/d).



Subsection (b) of Appendix A specifies that the ADE be calculated using, in specified order: a U.S. EPA verified RfD (an estimate of a daily exposure to a chemical which is expected to be without adverse health effects for humans for a lifetime of exposure in units of mg/kg-day), a NOAEL which has been identified as a result of human exposures, a LOAEL (lowest observed adverse effects level) which has been identified as a result of human exposures, a NOAEL which has been determined from studies with laboratory animals, and a LOAEL which has been determined from studies with laboratory animals.

Illinois EPA selected the ATSDR recommended dose MRL of 0.000003 (3E-06) mg/kg-day, as the verified RfD for use in calculating the ADE. The ADE equals the product of multiplying the toxicity value by 70 kilograms (kg), which is the assumed average body weight of an adult human per Section 620:

$$ADE = 0.000003 \text{ mg/kg-day} \cdot 70 \text{ kg} = 0.00021 \text{ mg/day}$$

The next step in the development of the HTTAC is the evaluation of chemical-specific RSC data available for the chemical. Illinois EPA evaluated data from ATSDR, U.S. EPA Office of Water, and values developed by other states. There is little scientific consensus regarding the contribution of drinking water to the total amount of PFAS exposure to humans. Humans are exposed to PFNA through a variety of media, including, but not limited to air emissions, ingestion of fish or other animals exposed to PFNA, dermal exposure and incidental exposure from PFNA-containing consumer products, much of which varies on a site-specific basis. Due to this lack of consensus, Illinois EPA elected to use the conservative default value of 20% (0.20) for its HTTAC calculation.

Finally, the HTTAC is calculated by the product of the RSC and the ADE, divided by the per capita daily water ingestion rate, specified in Appendix A as equal to 2 L/day:

$$HTTAC \text{ (mg/L)} = \frac{0.20 \cdot 0.00021 \text{ mg/day}}{2 \text{ L/day}}$$

$$HTTAC \text{ (mg/L)} = \frac{0.000042 \text{ mg/day}}{2 \text{ L/day}}$$

$$HTTAC = 0.000021 \text{ mg/L}$$

or:

$$21 \text{ ng/L or ppt}$$

The final step in ensuring a calculated guidance level is appropriate is to compare the guidance level to the chemical's practical quantitation limit (PQL), or minimum reporting level (MRL). U.S. EPA's Method 537.1 for analyses of PFAS drinking water samples states the PFNA MRL is 2 ng/L, which is below the calculated guidance level of 21 ng/L. Therefore, the guidance level is appropriate.



## REFERENCES

Agency for Toxic Substances & Disease Registry (ATSDR). 2018. Toxicological Profile for Perfluoroalkyls. PFAS-83 FR 34135 60 Day-18-18 AJK Docket No. ATSDR-2018-000, Available at: <https://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=1117&tid=237>

Das KP, Grey BE, Rosen MB, et al. 2015. Developmental toxicity of perfluorononanoic acid in mice. *Reprod Toxicol* 51:133-144. 10.1016/j.reprotox.2014.12.012.

IGA (Illinois General Assembly). Illinois Groundwater Protection Act (IGPA). 415 ILCS 55. Available at: <https://www.ilga.gov/legislation/ilcs/ilcs3.asp?ActID=1595&ChapterID=36>

PCB (Pollution Control Board). Title 35: Environmental Protection: Subtitle F: Public Water Supplies: Chapter I: Pollution Control Board. Part 620: Groundwater Quality. Available at: <https://pcb.illinois.gov/SLR/IPCBandIEPAEnvironmentalRegulationsTitle35>

U.S. EPA (United State Environmental Protection Agency) Office of Solid Waste and Emergency Response (OSWER). 2013. Tier 3 Toxicity Value White Paper. OSWER Document Number 9285.7-86. Available at: <https://www.epa.gov/sites/production/files/2015-11/documents/tier3-toxicityvalue-whitepaper.pdf>



# HEALTH ADVISORY SUMMARY LIST

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
Office of Toxicity Assessment



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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### HEALTH ADVISORY SUMMARY LIST

Prepared by:  
Office of Toxicity Assessment  
Illinois Environmental Protection Agency  
October 12, 2021

In accordance with 35 Illinois Administrative Code 620.610(b), the Illinois Environmental Protection Agency (Illinois EPA) is issuing a Health Advisory summary list. Section 620.610(b) directs the Illinois EPA to publish and make available to the public, at intervals of not more than 6 months, a comprehensive and up-to-date summary list of all Health Advisories.

The following table provides a summary list of all Illinois EPA Health Advisories currently in effect:

CASRN <sup>1</sup>	Chemical	Statewide Health Advisory Guidance Level (ng/L)	Health Advisory Issuance Date
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	140	January 28, 2021
307-24-4	Perfluorohexanoic acid (PFHxA)	560,000	January 28, 2021
335-67-1	Perfluorooctanoic acid (PFOA)	2	January 28, 2021
375-73-5	Perfluorobutanesulfonic acid (PFBS)	2,100	April 16, 2021
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	14	April 16, 2021
375-95-1	Perfluorononanoic acid (PFNA)	21	July 27, 2021

<sup>1</sup> CASRN = Chemical Abstract Services Registry Number

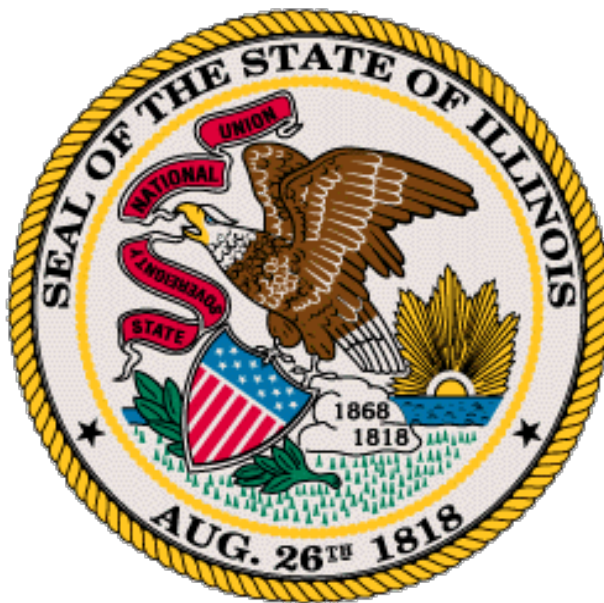
For more information regarding Illinois EPA Health Advisories, please refer to the following link: <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx>

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