

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

In the Matter of:)	
)	R 2022-018(A)
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 **TESTIMONY OF ERIC BALLENGER ON BEHALF OF NATIONAL WASTE & RECYCLING ASSOCIATION**, copies of which are hereby served upon you.

Dated: July 25, 2025

**NATIONAL WASTE
& RECYCLING ASSOCIATION**

By: /s/Scott B. Sievers
Scott B. Sievers

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**TESTIMONY OF ERIC BALLENGER ON BEHALF OF
NATIONAL WASTE & RECYCLING ASSOCIATION**

I. Introduction.

My name is Eric Ballenger. I have been employed by Republic Services (previously Allied Waste) since January of 1996. Republic Services is an American waste disposal company whose services include non-hazardous solid waste collection, waste transfer, waste disposal, recycling, and energy services. We are the second largest provider of waste disposal in the United States.

Prior to joining Republic Services, I was employed by EMCON, an environmental consulting firm. I am a Senior Manager of Hydrogeology for Republic Services. I assist in the management of environmental compliance at operating and closed landfills as well as manage multiple Superfund sites. My other duties include management of third-party environmental consultants and analytical laboratories, landfill greenfield and expansion hydrogeologic review, and remedial design and implementation. My management areas consist of the States of Arkansas, Illinois, Indiana, Minnesota, Missouri, Nebraska, Oklahoma, Texas, and Wisconsin.

I previously have provided both pre-written testimony and hearing testimony on behalf of the National Waste and Recycling Association – Illinois Chapter (“NWRA”) in the underlying rulemaking in R2022-018 in which I focused on the industry’s general concerns with the proposed new PFAS standards. The NWRA represents companies that manage waste products generated by businesses and residents in the State of Illinois.

Herein, I again am providing testimony on behalf of the NWRA. This testimony focuses on the economic impact that adding the PFAS standards to Part 620 would have on compliance costs under 35 Ill. Adm. Code 811 and 814, as well as other proposed revisions to the regulations.

II. Information Requested in May 15, 2025, Opinion and Order of the Board.

As part of my evaluation in the present matter, I am providing the following answers to the list of eight (8) questions posed by the Illinois Pollution Control Board (“Board”) in its May 15, 2025, Opinion and Order as outlined below. In addition to my own knowledge and experience, I worked with Andrews Engineering, Inc., through the direction of the NWRA, to assemble the data included herein.

1. Provide a list of affected landfills in Illinois, *i.e.*, landfills planning expansion and landfills undergoing assessment monitoring.

RESPONSE:

The evaluation of the cost impacts due to revisions to 35 Ill. Adm. Code Part 620 specific to the addition of six PFAS constituents is applicable to Illinois landfills currently operating or are in post-closure care regulated pursuant to 35 Ill. Adm. Code 811 and Part 814, Subpart C and Subpart D.

a. Landfills Regulated Pursuant to 35 Ill. Adm. Code Parts 811 and 814

The following tables identify the landfills that will be impacted by the proposed rule by classification under the Illinois regulations. It should be noted that the following table contains information pertaining only to those landfill companies represented by the NWRA within the State of Illinois.

Table 1 - Regulated by Part 811 or 814 Subpart C			
Name	Groundwater	Leachate	Stormwater
Brickyard LF Unit 2	Yes	Yes	Yes
Chain of Rocks Phase II South (Closed 2005)	Yes	Yes	No
Clinton Landfill	Yes	Yes	Yes
Cottonwood Hills	Yes	Yes	Yes
DeKalb County – East Unit	Yes	Yes	Yes
Dixon/GROP Landfill Phases III to V (closed July 2001)	Yes	Yes	No
LandComp Landfill	Yes	Yes	Yes
Laraway Solid Waste Unit	Yes	Yes	Yes
Lee County Landfill	Yes	Yes	Yes
Livingston Landfill D	Yes	Yes	Yes
North Milam	Yes	Yes	Yes
Orchard Hills	Yes	Yes	Yes
Peoria City/County #2 (Closed 2025)	Yes	Yes	Yes
Prairie Hill	Yes	Yes	Yes
Prairie View	Yes	Yes	Yes
River Bend Prairie	Yes	Yes	Yes
Sangamon Valley LF (Area II)	Yes	Yes	Yes
Spoon Ridge Landfill (Closed May 2011)	Yes	Yes	No
Winnebago Landfill – NEU, WEU, EEU	Yes	Yes	Yes

Table 2 - Regulated by 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Belleville LF (Closed Oct 1997)	Yes	Yes	No
Bond (Closed Oct 2011)	Yes	Yes	No
Brickyard LF Unit 1	Yes	Yes	Yes
Countryside Landfill	Yes	Yes	Yes
Davis Junction LF (Closed March 2000)	Yes	Yes	No
DeKalb County – West Unit (Closed	Yes	Yes	Yes

Table 2 - Regulated by 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Dixon/GROP Landfill Phase II (closed July 2001)	Yes	Yes	No
Eco Hill	Yes	Yes	Yes
Envirofil	Yes	Yes	Yes
Environtech, Inc. (closed July 2016)	Yes	Yes	No
Envotech - Illinois	Yes	Yes	Yes
ERC/Coles Co LF (Closed Oct 2010)	Yes	Yes	No
Five Oaks RDF	Yes	Yes	Yes
Greene Valley LF (Closed 1999)	Yes	Yes	No
Harbor View Landfill	Yes	Yes	Yes
Hickory Ridge	Yes	Yes	Yes
Illinois Landfill	Yes	Yes	Yes
Indian Creek Landfill	Yes	Yes	Yes
Kankakee LF (Closed 2006)	Yes	Yes	No
Livingston Landfill (ABC)	Yes	Yes	Yes
Mallard Lake LF (Closed Sep 2002)	Yes	Yes	Yes
McLean County Landfill/ASD (closed Dec 2018)	Yes	Yes	No
Milam Landfill	Yes	Yes	Yes
Modern Landfill (Closed December 1998)	Yes	Yes	No
Quad Cities Phase III LF (closed Oct 1999)	Yes	Yes	No
RCS Landfill (closed Oct 2011)	Yes	Yes	No
Rochelle Municipal LF	Yes	Yes	Yes
Roxana Landfill	Yes	Yes	Yes
Saline County Landfill (closed July 2007)	Yes	Yes	No?
Sangamon Valley LF Area I (closed Aug 2010)	Yes	Yes	Yes
Settlers Hill LF (Closed 2007)	Yes	Yes	No
Southern Illinois Regional LF	Yes	Yes	Yes

Table 2 - Regulated by 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Streator Area Landfill 3 (Closed Sep 2011)	Yes	Yes	No
Streator Area LF 3 (Closed Sep 2011)	Yes	Yes	No
Sumner Landfill	Yes	Yes	Yes
Tazewell LF (Closed 2007)	Yes	Yes	No
Upper Rock Island County LF	Yes	Yes	Yes
Valley View LF	Yes	Yes	Yes
Wayne County Regional LF	Yes	Yes	Yes
West End Landfill	Yes	Yes	Yes
Wheatland Prairie LF (Closed 2001)	Yes	Yes	No
Winnebago Landfill Northern/Southern Unit	Yes	Yes	Yes
Woodland LF (Closed 2005)	Yes	Yes	No

b. Landfills Planning Expansions

To my knowledge, currently there are no known facilities that have either filed for local siting approval for an expansion or have obtained local siting approval for an expansion that have not received permitted authorization from the Illinois Environmental Protection Agency (“Agency” or “Illinois EPA”). As such, no landfill expansions are herein reported. Construction and operation of undeveloped yet permitted areas are not considered expansions.

c. Landfills Undergoing Assessment Monitoring

The term “assessment monitoring” is specific to 35 Ill. Adm. Code Section 911.319(b). Assessment monitoring begins after a statistically observed exceedance has occurred and has been confirmed by a resample. An observed increase may also include eight consecutive quarterly increases in concentrations and/or consist of an increase above the previous concentration for organic parameters. The permit specifies what constitutes an exceedance.

An alternate source demonstration (“ASD”) may be submitted via permit application prior to implementing assessment monitoring. If the ASD is not successful, an assessment-monitoring program is initiated. Given that there have been no confirmed leachate leaks from a RCRA Subtitle D compliant liner system, any assessment monitoring concluding the facility is the source of the groundwater contamination is resulting from a disposal unit that does not contain a composite liner system (35 Ill. Adm. Code Part 814, Subpart D). Assessment monitoring of a Subtitle D composite liner system is expected to conclude that the source of apparent groundwater impacts are the result of background groundwater quality impacts and natural statistical variations.

Assessment monitoring not only includes facilities with newly confirmed increases but also includes those monitoring a groundwater management zone and corrective actions. Assessment monitoring typically is fine-tuned to the constituents of concern and may include a small number of constituents. The number of sites conducting assessment monitoring has been estimated based on known, existing groundwater management zones and corrective action programs. The number will vary over time.

Currently there are approximately 15 landfills undergoing assessment monitoring. It is reasonable to assume that if the assessment monitoring results in the establishment of a groundwater management zone or a corrective action, these sites will detect PFAS constituents in downgradient monitoring wells above the Class I groundwater quality standards.

2. How many of the affected landfills currently monitor for PFAS?

RESPONSE:

The regulations of 35 Ill. Adm. Code Part 620 are specific to groundwater. However, through incorporation by reference, landfill facilities also will be required to analyze the PFAS constituents in leachate samples if the current exemptions are eliminated. In addition, individual

NPDES permits require stormwater discharge to be monitored for a larger list of PFAS constituents.

At this time, no listed landfill is monitoring the groundwater for PFAS constituents, as no regulatory program has required such testing. Therefore, there is no groundwater quality information at the landfills for PFAS constituents. There have been minimal leachate analyses for the PFAS constituents. Where there have been analyses, concentrations exist above the groundwater quality standards, as expected. Those facilities with recent individual NPDES permits are required to analyze for PFAS at the discharge outfalls. The majority of results have shown detections above the standards in 35 Ill. Adm. Code Part 620. The presence of the PFAS constituents appears ubiquitous in surface water at the landfill properties.

If the exemptions contained in Sections 620.410(f) and 620.420(e) are eliminated, Illinois landfills will be required to monitor for PFAS compounds from 35 Ill. Adm. Code Part 620. The following table provides a list of NWRA-member facilities that will be required to monitor PFAS constituents in groundwater, leachate, and stormwater discharge (with individual NPDES permit only). Currently, only stormwater discharge is analyzed for PFAS constituents at some facilities.

Table 3 – NWRA Member Landfills	
Name	Classification
Belleville	Part 814 Subpart D (Closed Oct 1997)
Bond Co. LF	Part 814 Subpart C and D (Closed Oct 2011)
Brickyard LF Unit 1	814 Subpart C and D
Brickyard LF Unit 2	814 Subpart C
Chain of Rocks Phase II South	Part 811 Part 814 Subpart C (Closed 2005)
Clinton Landfill	Part 811 Part 814 Subpart C
Cottonwood Hills	Part 811 Part 814 Subpart C
Cottonwood Hills	Part 811 Part 814 Subpart C
Countryside	Part 814 Subpart C and D

Table 3 – NWRA Member Landfills	
Name	Classification
Countryside	Part 814 Subpart C and D
Davis Junction LF	Part 814 Subpart C and D (Closed March 2000)
DeKalb County – East Unit	Part 811 Part 814 Subpart C
DeKalb County – West Unit	Part 814 Subpart C and D (closed 2025)
Dixon/GROP Landfill Phase II	Part 814 Subpart C and D (closed July 2001)
Dixon/GROP Landfill Phase III to V	Part 814 Subpart C and D (closed July 2002)
Eco Hill Landfill	Part 814 Subpart C and D
Envirofil	Part 814 Subpart C and D
Environtech, Inc.	Part 814 Subpart C and D (closed July 2016)
Envotech-Illinois LF(Litchfield-Hillsboro Landfill)	Part 814 Subpart C and D
ERC/Coles Co LF	Part 814 Subpart D (Closed Oct 2010)
Five Oaks	Part 814 Subpart C and D
Greene Valley	Part 814 Subpart C and D (closed 1999)
Harbor View Landfill	Part 814 Subpart C and D
Hickory Ridge	Part 814 Subpart C and D
Illinois Landfill	Part 814 Subpart C and D
Indian Creek	Part 814 Subpart C and D
Kankakee	Part 814 Subpart C and D (closed 2006)
LandComp Landfill	Part 811
Laraway Solid Waste Unit	Part 811 Part 814 Subpart C
Lee County Landfill	Part 811
Livingston Landfill D	Part 811 Part 814 Subpart C
Livingston Landfill (ABC)	Part 814 Subpart C and D
Mallard Lake LF	Part 814 Subpart C and D (Closed Sep 2002)
McLean County Landfill/ ADS	Part 814 Subpart C and D (closed Dec 2018)
Milam	Part 814 Subpart C and D
Modern FL	Part 814 Subpart C and D (Closed December 1998)
North Milam	Part 811 Part 814 Subpart C
Orchard Hills	Part 811 Part 814 Subpart C
Peoria City/County #2	Part 811 Part 814 Subpart C (Closed 2025)
Prairie Hill	Part 811 Part 814 Subpart C
Prairie View	Part 811 Part 814 Subpart C
Quad Cities Phase III LF	Part 814 Subpart C and D (closed Oct 1999)
RCS Landfill	Part 814 Subpart C and D (closed Oct 2011)

Table 3 – NWRA Member Landfills	
Name	Classification
River Bend Prairie	Part 811 Part 814 Subpart C
Rochelle Municipal LF	Part 814 Subpart C and D
Roxana Landfill	Part 814 Subpart C and D
Saline County Landfill (closed July 2007)	Part 814 Subpart C and D
Sangamon Valley LF Area I (closed Aug 2010)	Part 814 Subpart C and D
Sangamon Valley LF Area II	Part 811 Part 814 Subpart C
Settlers Hill	Part 814 Subpart C and D
Southern Illinois Regional LF	Part 814 Subpart C and D
Spoon Ridge Landfill (Closed May 2011)	Part 811 Part 814 Subpart C
Streator Area Landfill 3 (Closed Sep 2011)	Part 814 Subpart C and D
Sumner Landfill	Part 814 Subpart C and D
Tazewell	Part 814 Subpart C and D
Upper Rock Island County LF	Part 814 Subpart C and D
Valley View	Part 814 Subpart C and D
Wayne County LF	Part 814 Subpart C and D
West End Disposal	Part 814 Subpart C and D
Wheatland Prairie	Part 814 Subpart C and D
Winnebago LF (NS Unit)	Part 814 Subpart C and D
Winnebago LF (NEU, WEU NEU)	Part 811 Part 814 Subpart C
Woodland	Part 814 Subpart C and D

Table 4 lists the NWRA-member landfills that are entirely Subtitle D compliant and are not expected to have any adverse impacts on groundwater quality. Table 5 lists the NWRA-member landfills that have continued to operate with areas under Part 814 Subpart D.

Table 4 - Part 811 and Part 814 Subpart C	
Name	
Brickyard LF Unit 2	
Chain of Rocks Phase II South (closed 2005)	
Clinton Landfill	
Cottonwood Hills	
DeKalb County – East Unit	
Dixon/GROP Landfill	
Phase III to V (closed July 2001)	
LandComp Landfill	
Laraway Solid Waste Unit	
Lee County Landfill	
Livingston Landfill (D)	
North Milam	
Orchard Hills	
Peoria City/County #2 (closed 2025)	
Prairie Hill	
Prairie View	
River Bend Prairie	
Sangamon Valley LF Area II (closed Aug 2010)	
Spoon Ridge Landfill (Closed May 2011)	
Winnebago (NEU, WEU NEU)	

Table 5 - 814 Subpart D	
Name	
Belleville (closed Oct 1997)	
Bond Co. LF.	
Brickyard LF Unit 1	
Countryside	
Davis Junction LF (Closed March 2000)	
DeKalb County – West Unit (closed 2025)	
Dixon/GROP Landfill	
Phase II (closed July 2001)	
Eco Hill Landfill	
Envirofil	
Environtech, Inc. (closed July 2016)	
Envotech-Illinois LF	
ERC/Coles Co LF(Closed Oct 2010)	
Five Oaks	
Greene Valley (closed	

Table 5 - 814 Subpart D
Name
Harbor View Landfill
Hickory Ridge
Illinois Landfill
Illinois Landfill
Indian Creek
Kankakee (closed
Livingston Landfill (ABC)
Mallard Lake LF (Closed Sep 2002)
McLean County Landfill/ADS (closed Dec 2018)
Milam
Modern FL (Closed December 1998)
Quad Cities Phase III LF (closed Oct 1999)
RCS Landfill (closed Oct 2011)
Rochelle Municipal LF
Roxana Landfill
Saline County Landfill (closed July 2007)
Sangamon Valley LF Area I (closed Aug 2010)
Settlers Hill (closed 2007)
Southern Illinois Regional LF
Streator Area Landfill 3 (Closed Sep 2011)
Sumner Landfill
Tazewell (closed 2007)
Upper Rock Island County LF
Valley View
Wayne County LF
West End Landfill
Wheatland Prairie (closed 2001)
Winnebago LF (NS Unit)
Woodland (closed 2003)

3. Do the affected landfills monitor on a quarterly, semi-annual, or annual basis?

RESPONSE:

Groundwater monitoring typically is conducted on a quarterly or semi-annual basis at Illinois landfills. In many cases, a facility will conduct both quarterly and semi-annual monitoring

dependent upon the individual well. The parameter lists for groundwater analyses can also vary. Disposal units containing monitoring programs specific to Part 814, Subpart D analyze for a comprehensive parameter list (List G2) during the second quarter sampling event. However, monitoring programs for units specific to Parts 811 and 814, Subpart C analyze the comprehensive list of constituents during the second and fourth quarters.

PFAS constituents will be analyzed in upgradient/background wells for derivation of background concentrations and as part of assessment monitoring defined in Section 811.319(b)(5)(A), which references constituents contained in Section 620.410. Statistical background concentrations will be derived from four consecutive quarterly sampling events. The Agency has stated the background PFAS data may need to be verified prior to permitting the proposed Applicable Groundwater Quality Standards (“AGQSs”), possibly requiring evaluations similar to assessment monitoring.

Table 6 lists the frequency that likely will be required to monitor for the PFAS constituents in groundwater leachate and stormwater discharge.

Table 6 - Member Landfills Monitoring Frequency for Section 620 PFAS Parameter				
Name	Classification	Groundwater	Leachate	Stormwater
Belleville	Part 814 Subpart D (Closed Oct 1997)	biennially	Annual	None
Bond Co. LF.	Part 814 Subpart C and D (Closed Oct 2011)	Semi Annual	Semi Annual	None
Brickyard LF Unit 1	814 Subpart C and D	None	None	None
Brickyard LF Unit 2	814 Subpart C	None	None	None
Chain of Rocks Phase II South	Part 811 Part 814 Subpart C (Closed 2005)	Semi Annual	Semi Annual	None
Clinton Landfill	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly

Table 6 - Member Landfills Monitoring Frequency for Section 620 PFAS Parameter				
Name	Classification	Groundwater	Leachate	Stormwater
Cottonwood Hills	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Countryside	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Davis Junction LF	Part 814 Subpart C and D (Closed March 2000)	Semi Annual	Semi Annual	None
DeKalb County – East Unit	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
DeKalb County – West Unit	Part 814 Subpart C and D (closed 2025)	Semi Annual	Semi Annual	Quarterly
Dixon/GROP Landfill Phase II	Part 814 Subpart C and D (closed July 2001)	Semi Annual	Semi Annual	None?
Dixon/GROP Landfill Phase III to V	Part 814 Subpart C and D (closed July 2002)	Semi Annual	Semi Annual	None?
Eco Hill Landfill	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Envirofil	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Environtech, Inc.	Part 814 Subpart C and D (closed July 2016)	Semi Annual	Semi Annual	None
Envotech-Illinois LF	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
ERC/Coles Co LF	Part 814 Subpart D (Closed Oct 2010)	Semi Annual	Semi Annual	None
Five Oaks	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Greene Valley	Part 814 Subpart C and D (closed 1999)	Semi Annual	Semi Annual	None
Harbor View Landfill	Part 814 Subpart C and D	None	None	None?
Hickory Ridge	Part 814 Subpart C and D	None	None	None?
Illinois Landfill	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Indian Creek	Part 814 Subpart C and D	None	None	None?

Table 6 - Member Landfills Monitoring Frequency for Section 620 PFAS Parameter				
Name	Classification	Groundwater	Leachate	Stormwater
Kankakee	Part 814 Subpart C and D (closed 2006)	Semi Annual	Semi Annual	None
LandComp Landfill	Part 811	Semi Annual	Semi Annual	Quarterly
Laraway Solid Waste Unit	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Lee County Landfill	Part 811	Semi Annual	Semi Annual	Quarterly
Livingston Landfill D	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Livingston Landfill (ABC)	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Mallard Lake LF	Part 814 Subpart C and D (Closed Sep 2002)	Semi Annual	Semi Annual	Quarterly
McLean County Landfill/ADS	Part 814 Subpart C and D (closed Dec 2018)	Semi Annual	Semi Annual	Quarterly
Milam	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Modern FL (Closed December 1998)	Part 814 Subpart C and D	Semi Annual	Semi Annual	None
North Milam	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Orchard Hills	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Peoria City/County #2	Part 811 Part 814 Subpart C (Closed 2025)	Semi Annual	Semi Annual	Quarterly
Prairie Hill	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Prairie View	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Quad Cities Phase III LF	Part 814 Subpart C and D (closed Oct 1999)	Semi Annual	Semi Annual	None?
RCS Landfill	Part 814 Subpart C and D	Semi Annual	Semi Annual	None

Table 6 - Member Landfills Monitoring Frequency for Section 620 PFAS Parameter				
Name	Classification	Groundwater	Leachate	Stormwater
	(closed Oct 2011)			
River Bend Prairie	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Rochelle Municipal LF	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Roxana Landfill	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Saline County Landfill	Part 814 Subpart C and D (closed July 2007)	Semi Annual	Semi Annual	None
Sangamon Valley LF Area I	Part 814 Subpart C and D (closed Aug 2010)	Semi Annual	Semi Annual	None?
Sangamon Valley LF Area II	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Settlers Hill	Part 814 Subpart C and D	Semi Annual	Semi Annual	None
Southern Illinois Regional LF	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Spoon Ridge LF (Closed May 2011)	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	None
Streator Area LF 3 (Closed Sep 2011)	Part 814 Subpart C and D	Semi Annual	Semi Annual	None
Sumner Landfill	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Tazewell	Part 814 Subpart C and D	Semi Annual	Semi Annual	None
Upper Rock Island County LF	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Valley View	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
Wayne County LF	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly
West End Landfill	Part 814 Subpart C and D	None	None	None?
Wheatland Prairie	Part 814 Subpart C and D	Semi Annual	Semi Annual	None
Winnebago LF (NS Unit)	Part 814 Subpart C and D	Semi Annual	Semi Annual	Quarterly

Table 6 - Member Landfills Monitoring Frequency for Section 620 PFAS Parameter				
Name	Classification	Groundwater	Leachate	Stormwater
Winnebago LF (NEU, WEU NEU)	Part 811 Part 814 Subpart C	Semi Annual	Semi Annual	Quarterly
Woodland	Part 814 Subpart C and D	Semi Annual	Semi Annual	None

Table 7 provides a list of the operating landfills in Illinois and the projected monitoring frequency for PFAS constituents if added to the existing sampling frequency for organic parameters.

Table 7 - Operating Landfills (1) Monitoring Frequency for Additional Section 620 PFAS Constituents				
Name	Classification (remaining years)	Groundwater	Leachate	Stormwater
Advanced Disposal Services Valley View Landfill Inc.	35	Semi Annual	Semi Annual	Quarterly
Brickyard Disposal and Recycling Inc.	19	Semi Annual	Semi Annual	Quarterly
Clinton Landfill #3	48	Semi Annual	Semi Annual	Quarterly
Cottonwood Hills RDF	74	Semi Annual	Semi Annual	Quarterly
Countryside Landfill Inc.	Closure 2027	Semi Annual	Semi Annual	Quarterly
DeKalb County Landfill (East)	25	Semi Annual	Semi Annual	Quarterly
Eco Hill Landfill	5	Semi Annual	Semi Annual	Quarterly
Envirofil of Illinois Inc.	92	Semi Annual	Quarterly	Quarterly
Envotech-Illinois LF (Litchfield-Hillsboro Landfill)	11	Semi Annual	Semi Annual	Quarterly
Five Oaks Recycling and Disposal Facility	22	Semi Annual	Semi Annual	Quarterly
Hickory Ridge Landfill	64	Semi Annual	Semi Annual	Quarterly
Illinois Landfill	169	Semi Annual	Semi Annual	Quarterly

Table 7 - Operating Landfills (1) Monitoring Frequency for Additional Section 620 PFAS Constituents				
Name	Classification (remaining years)	Groundwater	Leachate	Stormwater
Indian Creek Landfill No. 2	29	Semi Annual	Semi Annual	Quarterly
Knox County Landfill #3	6	Not Available	Not Available	Not Available
LandComp Landfill	22	Semi Annual	Semi Annual	Quarterly
Landfill #33 Ltd.	5	N/A	N/A	N/A
Laraway Recycling and Disposal Facility	19	Semi Annual	Semi Annual	Quarterly
Lee County Landfill Inc.	69	Semi Annual	Semi Annual	Quarterly
Livingston Landfill	22	Semi Annual	Semi Annual	Quarterly
Milam Recycling and Disposal Facility	25	Semi Annual	Semi Annual	Quarterly
North Milam Landfill	11	Semi Annual	Semi Annual	Quarterly
Orchard Hills Landfill	7	Semi Annual	Semi Annual	Quarterly
Peoria City/County Landfill #2	closed	Semi Annual	Semi Annual	Quarterly
Perry Ridge Landfill Inc.	47	Not Available	Not Available	Not Available
Prairie Hill Recycling and Disposal Facility	55	Semi Annual	Semi Annual	Quarterly
Prairie View Recycling and Disposal Facility	12	Semi Annual	Semi Annual	Quarterly
Quad Cities Landfill, Phase IV	43	Semi Annual	Semi Annual	Quarterly
Rochelle Municipal Landfill No. 3	65	Semi Annual	Semi Annual	Quarterly
Roxana Landfill LLC	16	Semi Annual	Semi Annual	Quarterly
Sangamon Valley Landfill Inc. (Area II)	10	Semi Annual	Semi Annual	Quarterly
Southern Illinois Regional Landfill Inc.	39	Semi Annual	Semi Annual	Quarterly
Sumner Landfill Inc.	24	Semi Annual	Semi Annual	Quarterly
Upper Rock Island County Landfill	14	Semi Annual	Semi Annual	Quarterly

Table 7 - Operating Landfills (1) Monitoring Frequency for Additional Section 620 PFAS Constituents				
Name	Classification (remaining years)	Groundwater	Leachate	Stormwater
West End Disposal Facility	75	N/A	N/A	N/A
Winnebago Landfill	11	Semi Annual	Semi Annual	Quarterly
Zion Landfill	Closure 2027	N/A	N/A	N/A
Notes: (1) Illinois Landfill Disposal Capacity Report Illinois EPA July 2024				

4. What would be the potential incremental cost of adding Part 620 PFAS constituents to existing monitoring program at affected landfills?

RESPONSE:

If the exemptions contained in Sections 620.410(f) and 620.420(e) are eliminated, the establishment of background concentrations will be required at a minimum, as will testing in the leachate, on the schedule provided in the current landfill permit. Table 8 provides a list of the estimated additional incremental cost for landfills in Illinois for additional groundwater and leachate monitoring. It was assumed PFAS constituents will be added to the List G2 parameters analyzed pursuant to the permit (semi-annual for Parts 811 and 814 Subpart C programs, and annually for Part 814 Subpart D programs). It is assumed the PFAS constituents will be contained in the L2 leachate list of parameters, with the number of sampling events based on the number of leachate monitoring points for each program. The incremental costs also will include derivation of the AGQs for the PFAS constituents and related permitting. Costs for PFAS monitoring for stormwater are not included in this study as those are required under a separate regulatory program.

It is assumed a minimum of four quarters of background analyses will be required. Then there may need to be justification or an ASD done to show the detections are not the result of a release. There is no intention of the Agency putting the PFAS parameters on routine lists.

The data for the number and frequency of the sampling locations used was provided by the NWRA-member landfills. In addition, the published remaining operating years provided in the most recent Agency landfill capacity report dated July 2024 for 2023 capacity was used. The estimate assumes PFAS would be added to the existing groundwater and leachate lists and analyzed with the other organic compounds. The cost for the analyses for the six (6) additional PFAS constituents (HFPO-DA, PFBS, PFHxS, PFNA, PFOA and PFOS) in groundwater and leachate to obtain the method detection limits to meet the Section 620 groundwater quality standards (0.000010 mg/L, 0.002 mg/L, 0.000010 mg/L, 0.000010 mg/L, 0.000004 mg/L and 0.000004 mg/L respectively) was provided by Eurofins Environmental Testing located in Tinley Park, Illinois.

A compilation of the estimated laboratory costs for the remaining life of the sites was calculated assuming \$375 per sample analysis using an estimate provided by Eurofins and is provided below:

Table 8 – Potential Incremental Cost of Adding Part 620 PFAS Constituents	
	Estimated Cost
Part 814 Subpart D Site Monitoring	\$32,629,125
Part 811 & Part 814 Subpart C Site Monitoring	\$22,613,625

The estimated costs for additional monitoring were based upon the data provided by the NWRA-member landfills. Most of the additional costs can be avoided if the monitoring parameters only are added to the Appendix II list of parameters. The additional parameters only would be added during assessment monitoring chemical analyses of groundwater and leachate samples. This would result in a significant cost savings if the PFAS Section 620 standards were not added to the

typical organic monitoring parameters for groundwater and leachate. The details of the cost estimate are provided in Appendix A.1 for Part 814 Subpart D Site Monitoring and Appendix A.2 for Part 811 & Part 814 Subpart C Site Monitoring attached herein.

Table 9 - Operating Landfills (1) Incremental Costs for Additional Section 620 PFAS Parameter				
Name	Classification (remaining years)	Groundwater⁽²⁾ (semiannual)	Leachate (annual reporting)	Stormwater (Quarterly)
Advanced Disposal Services Valley View Landfill Inc.	35	47	16	3
Brickyard Disposal and Recycling Inc.	19	41	6	4
Clinton Landfill #3	48	54	3	2
Cottonwood Hills RDF	74	16	6	3
Countryside Landfill Inc.	Closure 2027	25	6	1
DeKalb County Landfill (East)	25	19 +20	3 +6	4
Eco Hill Landfill	5	17	2	4
Envirofil of Illinois Inc.	92	24	52	8
Envotech-Illinois LF (Litchfield- Hillsboro Landfill)	11	56	2	2
Five Oaks Recycling and Disposal Facility	22	22 +2	14 +4	7
Hickory Ridge Landfill	64	24	3	4
Illinois Landfill	169	28	4	2
Indian Creek Landfill No. 2	29	17	3	4
Knox County Landfill #3	6	N/A	N/A	NA
LandComp Landfill	22	20 + 11	3	3

Table 9 - Operating Landfills (1) Incremental Costs for Additional Section 620 PFAS Parameter				
Name	Classification (remaining years)	Groundwater⁽²⁾ (semiannual)	Leachate (annual reporting)	Stormwater (Quarterly)
Landfill #33 Ltd.	5	N/A	N/A	N/A
Laraway Recycling and Disposal Facility	19	41 +11	6	7 +2
Lee County Landfill	69	56 +32	3	2
Livingston Landfill	22	107 +36	37	5
Milam Recycling and Disposal Facility	25	40	3	3
North Milam Landfill	11	75	18	3
Orchard Hills Landfill	7	26	4	4
Peoria City/County Landfill #2	closed	21	3	4
Perry Ridge Landfill Inc.	47			
Prairie Hill Recycling and Disposal Facility	55	33 +7	4	4
Prairie View Recycling and Disposal Facility	12	21	6	4
Quad Cities Landfill, Phase IV	43	19	2	0
Rochelle Municipal Landfill No. 3	65	58 +27	6	3
Roxana Landfill LLC	16	57	7	4
Sangamon Valley Landfill Inc. (Area II)	10	16 +4	2	3
Southern Illinois Regional Landfill Inc.	39	51	4	5
Sumner Landfill Inc.	24	8	2	1

Table 9 - Operating Landfills (1) Incremental Costs for Additional Section 620 PFAS Parameter				
Name	Classification (remaining years)	Groundwater⁽²⁾ (semiannual)	Leachate (annual reporting)	Stormwater (Quarterly)
Upper Rock Island County Landfill	14	20	4/5	3
West End Disposal Facility	75	N/A	N/A	N/A
Winnebago Landfill	11	106	12	11
Zion Landfill	Closure 2027	N/A	N/A	N/A
Notes: (1) Illinois Landfill Disposal Capacity Report Illinois EPA July 2024 (2) Groundwater monitoring wells can be monitored quarterly or semiannually. Semiannual is assumed for additional PFAS monitoring since typically the organic parameters are collected semi annually				

Table 10 - Part 811 and Part 814 Subpart C			
Name	Groundwater	Leachate	Stormwater
Brickyard LF Unit 2	18 semi annual	2 semi annual	4 quarterly
Chain of Rocks Phase II South (closed 2005)	14 semi annual	2 annual 1 semi annual	0
Clinton Landfill	78 semi annual	6 semi annual	6 quarterly
Cottonwood Hills	15 semi annual	4 annual	3 quarterly
DeKalb County – East Unit	19 +20 semi annual	3 +6 annual 1 semi annual	4 quarterly
Dixon/GROP Landfill Phase III to V (closed July 2001)	19 semi annual	1 semi annual	0
LandComp Landfill	20 +11 semi annual	3 annual	3 quarterly
Laraway Solid Waste Unit	41 +11 semi annual	3 semi annual	7 +2 quarterly
Lee County Landfill	56 +32 semi annual	3 annual	2 quarterly
Livingston Landfill D	57 +36 semi annual	5 semi annual	5 quarterly
North Milam	75 semi annual	4 quarterly 1 semi annual	3 quarterly
Orchard Hills	26 semi annual	2 semi annual 1 quarterly	4 quarterly

Peoria City/County #2 (closed 2025)	21 semi annual	1 annual 1 semi annual	4 quarterly
Prairie Hill	33 +7 semi annual	3 semi annual	4 quarterly
Prairie View	21 semi annual	3 semi annual	4 quarterly
River Bend Prairie	N/A	N/A	N/A
Sangamon Valley Landfill (Area II)	16 +4 semi annual	1 semi annual	3 quarterly
Spoon Ridge LF (Closed May 2011)	16 semi annual	1 semi annual	0
Winnebago LF (NEU, WEU NEU)	69 +9 semi annual	6 semiannual	11 quarterly
Groundwater monitoring wells can be monitored quarterly or semiannually. Semiannual is assumed for additional PFAS monitoring since typically the organic parameters are collected semi annually			

Table 11 - 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Belleville (Closed Oct 1997)	18 biennially	1 semi annual	none
Bond Co. LF (closed Oct 2011)	10 semi annual	1 semi annual	0
Brickyard LF Unit 1	23 semi annual	1 semi annual	none
Countryside	25 semi annual	3 semi annual	1 quarterly
Davis Junction LF (Closed March 2000)	21 semi annual	1 semi annual	none
DeKalb County – West Unit (closed 2025)	32 semi annual	3 semi annual	4 quarterly
Dixon/GROP Landfill Phase II (closed July 2001)	18 semi annual	1 semi annual	none
Eco Hill Landfill	17 semi annual	1 semiannual	4 quarterly
Envirofil	24 semi annual	13 quarterly 1 semi annual	8 quarterly
Environtech, Inc. (closed November 2016)	13 semi annual	1 semi annual	0
Envotech-Illinois LF	56 semi annual	2 semi annual	2 quarterly
ERC/Coles Co LF(Closed Oct 2010)	13 semi annual	1 semi annual	none
Five Oaks	22 +2 semi annual	3 +1 quarterly 1 semi annual	7 quarterly

Table 11 - 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Greene Valley	19 semi annual	2 semi annual 1 quarterly	none
Harbor View Landfill			
Hickory Ridge LF	24 semi annual	6 semi annual	4 semi annual
Illinois Landfill	28 semi annual	2 semi annual	2 quarterly
Indian Creek LF	17 semi annual	6 semi annual	4 semi annual
Kankakee	15 semi annual	2 annual 15 semi annual	none
Livingston Landfill (ABC)	50 semi annual	32 semi annual	5 quarterly
Mallard Lake LF (Closed Sep 2002)	37 semi annual	2 semi annual	none
McLean County Landfill/ADS (closed Dec 2018)	20 semi annual	2 semi annual	2 quarterly
Milam	25 semi annual	3 semi annual	3 quarterly
Modern FL (Closed December 1998)	19 semi annual	1 semi annual	none
Quad Cities Phase III LF (closed Oct 1999)	19 semi annual	2 semi annual	none
RCS Landfill (closed Oct 2011)	10 semi annual	1 semi annual	none
Rochelle Municipal	58 semi annual	3 semi annual	3 quarterly
Roxana Landfill LLC	57 semi annual	5/2 Semiannual	4 quarterly
Saline County Landfill (closed July 2007)	23 semi annual	2/1 Semiannual	none
Sangamon Valley Landfill Area I (closed Aug 2010)	26 semi annual	2/1 Semiannual	none
Settlers Hill (closed 2007)	15 semi annual	3 semi annual	none
Southern Illinois Regional Landfill Inc.	51 semi annual	2/1 Semiannual	5 quarterly
Streator Area LF 3 (Closed Sep 2011)	15 semi annual	2/1 Semiannual	none
Sumner Landfill	8 semi annual	1 semiannual	1 quarterly
Tazewell (closed 2007)	17 semi annual	1 annual 1 semi annual	none
Upper Rock Island County LF	20 semi annual	2/3 alt 2 semi annual	3 quarterly

Table 11 - 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Valley View	47 semi annual	2 semi annual 1 monthly	3 quarterly
Wayne County LF	15 semi annual	1 semiannual	3 quarterly
West End LF			
Wheatland Prairie (closed 2001)	26 semi annual	3 semi annual	none
Winnebago LF (NS Unit)	50 semi annual	2 semiannual	0quarterly
Woodland (closed 2003)	24 semi annual	3 semi annual	none
Groundwater monitoring wells can be monitored quarterly or semiannually. Semiannual is assumed for additional PFAS monitoring since typically the organic parameters are collected semi annually			

5. What additional cost do landfills incur to monitor for PFAS?

RESPONSE:

The incremental cost increase for adding the PFAS constituents to the groundwater and leachate monitoring programs was addressed above. Additional costs beyond derivation of the background analyses (four consecutive sampling events for upgradient/background wells) and monitoring of the G2 and L2 list of parameters is wide-ranging. These costs may include the following:

- a. Evaluation of the detections of the PFAS constituents within the background wells. This may include additional sampling of groundwater, surface water, and soils, and may include installation and sampling of additional monitoring wells;
- b. Evaluation of potential cross-contamination from old well construction and pumps. This may include the replacement of wells and/or pumps;
- c. Evaluation of the rate and extent of PFAS constituents detected above the 35 Ill. Adm. Code Part 620 standard(s). This will include additional well installations, related sampling, and permitting. Dependent upon the geometry of the site, property, and hydrogeologic

characteristics, multiple drilling programs may be necessary to adequately identify the extent of concentrations above the applicable standards;

- d. Conducting the Corrective Action Measures Assessment (“CAMA”), holding public meetings, designing and permitting of potential corrective action pursuant to 35 Ill. Adm. Code Section 811.324;
- e. Revision of the contaminant transport model to accommodate either the CAMA, or revision of the model due to a failure at the time of a permit renewal application where PFAS constituents are incorporated into the Groundwater Impact Assessment (“GIA”);
- f. Design, permitting, and installation of contingent remediation programs resulting from contaminant transport model failures due to the extremely low limits of the PFAS constituents;
- g. Design modification for new areas based on the GIA results. The current regulatory framework requires a passing contaminant transport model (“CTM”). For a number of Illinois landfills, the Agency policy requirements for the CTM setup, initial failure is likely to occur. At this point, the landfill can incorporate a contingent remediation program, or redesign the liner system (thicker liner, higher transmissive leachate collection system, etc.) to achieve a passing CTM. Any one of these can lead to substantially more costs simply to achieve the extremely low PFAS standards in the GIA; and
- h. Other efforts and costs that are unknown at this time will likely be applicable.

The following table provides additional estimated costs resulting from implementation of the PFAS constituents to 35 Ill. Adm. Code Part 620. The costs do not include corrective action installation and operation.

Table 12 – Estimate of Additional Costs for the Impact to Monitor for the Detection of PFAS Constituents	
	Estimated Cost
Part 814 Subpart D Site Assessment	\$2,616,750
Part 811 & Part 814 Subpart C Site Assessment	\$818,000
See Appendix B.1 and B.2 for Site Specific Estimates.	

The estimated costs for additional monitoring provided above were based upon the data provided by the NWRA-member landfills. The estimated costs have been prepared assuming an extra two samples will be required in a year for each groundwater and leachate monitoring location to establish background concentrations. It is assumed background concentrations for PFAS parameters can be established for approximately \$10,000 in an assessment report contained in a permit application. One permit application is assumed during operation and the post-closure care period. The estimate does not include additional assessment monitoring for Appendix II parameters, revisions to the groundwater impact assessment, or other site investigations that may be required to complete the assessment. The details for each NWRA-member landfill used to prepare the estimate are provided in Appendix B.1 for the Part 814 Subpart D sites and in Appendix B.2 for the Part 811 and the Part 814 Subpart C landfills attached herein.

Table 13 - Additional Cost for Operating Landfills to Monitoring for Additional Section 620 PFAS Parameter				
Name	Classification (remaining years)	Groundwater (semi annual)	Leachate (annual)	Stormwater (Quarterly)
Advanced Disposal Services Valley View Landfill Inc.	35	47	16	12
Brickyard Disposal and Recycling Inc.	19	41	3	4
Clinton Landfill #3	48	N/A	N/A	N/A

Table 13 - Additional Cost for Operating Landfills to Monitoring for Additional Section 620 PFAS Parameter				
Name	Classification (remaining years)	Groundwater (semi annual)	Leachate (annual)	Stormwater (Quarterly)
Cottonwood Hills RDF	74	16	6	3
Countryside Landfill Inc.	Closure 2027	25	3	1
DeKalb County Landfill	25	19 +20	3 +6	4
Eco Hill	5	17	2	4
Envirofil of Illinois Inc.	92	24	52	8
Envotech-Illinois LF (Litchfield-Hillsboro Landfill)	11	56	4	2
Five Oaks Recycling and Disposal Facility	22	22 +2	14 +4	7
Hickory Ridge Landfill	64	24	6	4
Illinois Landfill	169	28	2	2
Indian Creek Landfill No. 2	29	17	6	4
Knox County Landfill #3	6	N/A	N/A	N/A
LandComp Landfill	22	20 +11	3	3
Landfill #33 Ltd.	5	N/A	N/A	N/A
Laraway Recycling and Disposal Facility	19	41 +11	3	7 +2
Lee County Landfill	69	56 +32	3	2
Livingston Landfill	22	107 +36	37	5
Milam Recycling and Disposal Facility	25	40	3	3
North Milam Landfill	11	75	18	3
Orchard Hills Landfill	7	26	4	4
Peoria City/County Landfill #2	closed	21	3	4
Perry Ridge Landfill Inc.	47	N/A	N/A	N/A
Prairie Hill Recycling and Disposal Facility	55	33 +7	4	4
Prairie View Recycling and Disposal Facility	12	12	21	6

Table 13 - Additional Cost for Operating Landfills to Monitoring for Additional Section 620 PFAS Parameter				
Name	Classification (remaining years)	Groundwater (semi annual)	Leachate (annual)	Stormwater (Quarterly)
Quad Cities Landfill, Phase IV	43	19	2	0
Rochelle Municipal Landfill No. 3	65	58 +27	6	3
Roxana Landfill LLC	16	57	7	4
Sangamon Valley Landfill Inc. (Area II)	10	16 +4	2	3
Southern Illinois Regional Landfill Inc.	39	51	4	5
Sumner Landfill Inc.	24	8	2	1
Upper Rock Island County Landfill	14	20	4/5	3
West End Disposal Facility	75	N/A	N/A	N/A
Winnebago Landfill	11	106	12	11
Zion Landfill	Closure 2027	N/A	N/A	N/A
Notes: (1) Illinois Landfill Disposal Capacity Report Illinois EPA July 2024				

Table 14 - Part 811 and Part 814 Subpart C			
Name	Groundwater	Leachate	Stormwater
Brickyard LF Unit 2	18 semi annual	2 semi annual	4 quarterly
Chain of Rocks Phase II South (closed 2005)	14 semi annual	2 annual 1 semi annual	0
Clinton Landfill	78 semi annual	6 semi annual	6 quarterly
Cottonwood Hills	15 semi annual	4 annual	3 quarterly
DeKalb County – East Unit	19 +20 semi annual	3 +6 annual 1 semi annual	4 quarterly
Dixon/GROP Landfill Phase III to V (closed July 2001)	19 semi annual	1 semi annual	0
LandComp Landfill	20 +11 semi annual	3 annual	3 quarterly
Laraway Solid Waste Unit	41 +11 semi annual	3 semi annual	7 +2 quarterly
Lee County Landfill	56 +32 semi annual	3 annual	2 quarterly
Livingston Landfill D	57 +36 semi annual	5 semi annual	5 quarterly

North Milam	75 semi annual	4 quarterly 1 semi annual	3 quarterly
Orchard Hills	26 semi annual	2 semi annual 1 quarterly	4 quarterly
Peoria City/County #2 (closed 2025)	21 semi annual	1 annual 1 semi annual	4 quarterly
Prairie Hill	33 +7 semi annual	3 semi annual	4 quarterly
Prairie View	21 semi annual	3 semi annual	4 quarterly
River Bend Prairie	N/A	N/A	N/A
Sangamon Valley Landfill (Area II)	16 +4 semi annual	1 semi annual	3 quarterly
Spoon Ridge LF (Closed May 2011)	16 semi annual	1 semi annual	0
Winnebago LF (NEU, WEU NEU)	69 +9 semi annual	6 semiannual	11 quarterly

Table 15 - 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
ADS/McLean County Landfill (closed Dec 2018)	20 semi annual	2 semi annual	2 quarterly
Belleville (Closed Oct 1997)	18 biennially	1 semi annual	None
Bond Co. LF (closed Oct 2011)	10 semi annual	1 semi annual	0
Brickyard LF Unit 1	23 semi annual	1 semi annual	None
Countryside	25 semi annual	3 semi annual	1 quarterly
Davis Junction LF (Closed March 2000)	21 semi annual	1 semi annual	None
DeKalb County – West Unit (closed 2025)	32 semi annual	3 semi annual	4 quarterly
Dixon/GROP Landfill Phase II (closed July 2001)	18 semi annual	1 semi annual	none
Eco Hill Landfill	17 semi annual	1 semiannual	4 quarterly
Envirofil	24 semi annual	13 quarterly 1 semi annual	8 quarterly
Environtech, Inc. (closed November 2016)	13 semi annual	1 semi annual	0
Envotech-Illinois LF	56 semi annual	2 semi annual	2 quarterly

Table 15 - 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
ERC/Coles Co LF (Closed Oct 2010)	13 semi annual	1 semi annual	None
Five Oaks	22 +2 semi annual	3 +1 quarterly 1 semi annual	7 quarterly
Greene Valley	19 semi annual	2 semi annual 1 quarterly	none
Harbor View Landfill	N/A	N/A	N/A
Hickory Ridge LF	24 semi annual	6 semi annual	4 semi annual
Illinois Landfill	28 semi annual	2 semi annual	2 quarterly
Indian Creek LF	17 semi annual	6 semi annual	4 semi annual
Kankakee	15 semi annual	2 annual 15 semi annual	none
Livingston Landfill (ABC)	50 semi annual	32 semi annual	5 quarterly
Mallard Lake LF (Closed Sep 2002)	37 semi annual	2 semi annual	none
Milam	25 semi annual	3 semi annual	3 quarterly
Modern FL (Closed December 1998)	19 semi annual	1 semi annual	none
Quad Cities Phase III LF (closed Oct 1999)	19 semi annual	2 semi annual	none
RCS Landfill (closed Oct 2011)	10 semi annual	1 semi annual	none
Rochelle Municipal Landfill	58 +27 semi annual	3 semi annual	3 quarterly
Roxana Landfill LLC	57 semi annual	5/2 Semiannual	4 quarterly
Saline County Landfill (closed July 2007)	23 semi annual	2/1 Semiannual	none
Sangamon Valley Landfill Area I (closed Aug 2010)	26 semi annual	2/1 Semiannual	none
Settlers Hill (closed 2007)	15 semi annual	3 semi annual	none
Southern Illinois Regional Landfill Inc.	51 semi annual	3/1 Semiannual	5 quarterly
Streator Area LF 3 (Closed Sep 2011)	15 semi annual	2/1 Semiannual	none
Sumner Landfill	8 semi annual	1 semiannual	1 quarterly
Tazewell (closed 2007)	17 semi annual	1 annual 1 semi annual	none
Upper Rock Island County LF	20 semi annual	2/3 alt 2 semi annual	3 quarterly
Valley View	47 semi annual	2 semi annual	3 quarterly

Table 15 - 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
		1 monthly	
Wayne County LF	15 semi annual	1 semiannual	3 quarterly
West End LF	N/A	N/A	N/A
Wheatland Prairie (closed 2001)	26 semi annual	3 semi annual	none
Winnebago LF (NS Unit)	50 semi annual	2 semiannual	0 quarterly
Woodland (closed 2003)	24 semi annual	3 semi annual	none

6. How many of the affected landfills in the State are expected to begin corrective action to address PFAS if Part 620 PFAS constituents are included under the groundwater quality standards?

RESPONSE:

As stated above, the landfill regulatory programs (35 Ill. Adm. Code Parts 811 and 814) do not currently require sampling and analyses for the PFAS constituents. Therefore, there are no landfills that immediately will begin corrective action upon elimination of the exemptions provided in Sections 620.410(f) and 620.420(e). However, it is expected that each of the 15 landfills in assessment/corrective action will require rate and extent evaluations for the PFAS constituents when added to the assessment monitoring list (Section 811.319(b)(5)(A)). This will result in implementation of additional measures as defined above and ultimately require revision to any existing corrective action program.

Any site that does not contain a composite liner system is susceptible to impacts from PFAS constituents due to the extremely low standards. The sites containing units constructed pursuant to Part 814, Subpart D fit that description. There are 24 sites/units listed as being regulated pursuant to Part 814, Subpart D; seven of the 24 sites are known to already be in assessment or corrective action.

7. What is the estimated cost of PFAS-related corrective action for each landfill?

RESPONSE:

The following table provides a list of the estimated additional cost for the operating landfills in Illinois for corrective action for PFAS in groundwater. It is assumed no remediation will be required for Part 811 and Part 814 Subpart C facilities since these facilities are designed and constructed with composite liner and leachate management systems. The estimate assumes only Part 814 Subpart D units will require remediation.

A generalized cost estimate was used for the projected remedial costs associated with groundwater impacts attributed to the NWRA member landfills with groundwater impacts identified during assessment monitoring in the previous sections. The estimates assume no PFAS remediation would be necessary at landfills construction entirely with Subtitle D liner systems (Parts 811 and 814 Subpart C). The cost estimates were based upon data provided by the NWRA-member landfill operators. Operating landfill durations were obtained from the Illinois EPA Landfill Capacity Report dated July 2024 for 2023. The data used to estimate the remedial costs were obtained from the information provided in the Minnesota Pollution Control Agency Report dated May 2023 titled “Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal and Destruction from Municipal Wastewater, Biosolids, Landfill Leachate, and Compost Contact Water” and found online at <https://www.pca.state.mn.us/sites/default/files/c-pfc1-26.pdf> (hereinafter “Minnesota Study”), as well as from an internal case study prepared by Republic Services in July 2025. The estimated costs are for the projected operating life of the facility, unless closed. The estimated costs include 30 years of post-closure care unless an alternative minimum post-closure care period is required. The following table provides the estimated remedial costs.

Table 16 - Estimate of Cost of PFAS-Related Corrective Action for Each Impacted Landfill			
Part 814 Subpart D Site Remediation	GAC with high temperature Incineration (Alt 1a)	Foam fractionation with high temperature incineration of foamate (Alt 8a)	Republic Case Study (2)
Median	\$139,094,000	\$441,705,000	\$598,660,670
High	\$164,519,000	\$581,667,000	
Low	\$113,669,000	\$301,743,000	\$549,460,670
<p>(1) Cost provided for PFAS leachate treatment in Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal and Destruction from Municipal Wastewater, Biosolids, Landfill Leachate, and Compost Contact Water Prepared for Minnesota Pollution Control Agency dated May 2023.</p> <p>(2) Cost provided by Republic Services for the collection of contaminated groundwater and treatment of PFAS contaminated groundwater in July 2025.</p> <p>(3) See Appendix C for Site Specific Estimates.</p>			

The estimates for the remediation of the PFAS-contaminated groundwater were variable. The Minnesota Study (which appears to be the most comprehensive study to date evaluating the impacts of PFAS-related monitoring) ranged significantly from a low- to high-construction cost depending upon the selected treatment. The two top options evaluated were granular activated carbon with high temperature incineration and a foam fractionation with high temperature incineration resulting in a total range of \$112MM up to \$558MM. The case study provided by Republic Services indicates capital costs for the project of \$3.893MM but indicated some initial design and construction issues with first-time construction may be mitigated in future construction, reducing the cost potential by \$1.2MM. Details of the estimate for each NWRA-member landfill is provided in Appendix C attached herein.

Table 17 - Estimated Cost for Additional Section 620 PFAS Parameter Corrective Action (shown with Alt 1a remedial option)				
Name	Classification (remaining years)	Groundwater	Leachate (2)	Stormwater
Advanced Disposal Services Valley View Landfill Inc.	35	\$0.103M Cap. \$0.04M Annual (X30 pcc+35 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+35 operating)	none
Brickyard Disposal and Recycling Inc.	19	\$0.103M Cap. \$0.04M Annual (X30 pcc+19 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+19 operating)	none
Clinton Landfill #3	48	none	none	none
Cottonwood Hills RDF	74	none	none	none
Countryside Landfill Inc.	Closure 2027	\$0.103M Cap. \$0.04M Annual (X30 pcc+2 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+2 operating)	none
DeKalb County Landfill	25	none	none	none
Eco Hill Landfill	5	\$0.103M Cap. \$0.04M Annual (X30 pcc+5 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+5 operating)	none
Envirofil of Illinois Inc.	92	\$0.103M Cap. \$0.04M Annual (X30 pcc+92 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+92 operating)	none
Envotech-Illinois LF (Litchfield-Hillsboro Landfill)	11	\$0.103M Cap. \$0.04M Annual (X30 pcc+11 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+11 operating)	none

Table 17 - Estimated Cost for Additional Section 620 PFAS Parameter Corrective Action (shown with Alt 1a remedial option)				
Name	Classification (remaining years)	Groundwater	Leachate (2)	Stormwater
Five Oaks Recycling and Disposal Facility	22	\$0.103M Cap. \$0.04M Annual (X30 pcc+22 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+22 operating)	none
Hickory Ridge Landfill	64	\$0.103M Cap. \$0.04M Annual (X30 pcc+64operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+64 operating)	none
Illinois Landfill	169	\$0.103M Cap. \$0.04M Annual (X30 pcc+169 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+169 operating)	none
Indian Creek Landfill No. 2	29	\$0.103M Cap. \$0.04M Annual (X30 pcc+29 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+29operating)	none
Knox County Landfill #3	6	N/A	N/A	
LandComp Landfill	22	none	none	none
Landfill #33 Ltd. (Rumpke)	5			
Laraway Recycling and Disposal Facility	19	none	none	none
Lee County Landfill	69	none	none	none
Livingston Landfill	22	\$0.103M Cap. \$0.04M Annual (X30 pcc+22 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+22 operating)	none

Table 17 - Estimated Cost for Additional Section 620 PFAS Parameter Corrective Action (shown with Alt 1a remedial option)				
Name	Classification (remaining years)	Groundwater	Leachate (2)	Stormwater
Milam Recycling and Disposal Facility	25	\$0.103M Cap. \$0.04M Annual (X30 pcc+25 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+25 operating)	none
North Milam Landfill	11	none	none	none
Orchard Hills Landfill	7	none	none	none
Peoria City/County Landfill #2	closed	none	none	none
Perry Ridge Landfill Inc.	47	N/A	N/A	
Prairie Hill Recycling and Disposal Facility	55	none	none	none
Prairie View Recycling and Disposal Facility	12	none	none	none
Quad Cities Landfill, Phase IV	43	\$0.103M Cap. \$0.04M Annual (X30 pcc+43 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+43 operating)	none
Rochelle Municipal Landfill No. 3	65	\$0.103M Cap. \$0.04M Annual (X30 pcc+65 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+65 operating)	none
Roxana Landfill LLC	16	\$0.103M Cap. \$0.04M Annual (X30 pcc+16 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+16 operating)	none

Table 17 - Estimated Cost for Additional Section 620 PFAS Parameter Corrective Action (shown with Alt 1a remedial option)				
Name	Classification (remaining years)	Groundwater	Leachate (2)	Stormwater
Sangamon Valley Landfill Inc.	10	\$0.103M Cap. \$0.04M Annual (X30 pcc+10 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+10 operating)	none
Southern Illinois Regional Landfill Inc.	39	\$0.103M Cap. \$0.04M Annual (X30 pcc+16 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+16 operating)	none
Sumner Landfill Inc.	24	\$0.103M Cap. \$0.04M Annual (X30 pcc+24 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+24 operating)	none
Upper Rock Island County Landfill	14	\$0.103M Cap. \$0.04M Annual (X30 pcc+14 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+14 operating)	none
West End Disposal Facility	75	N/A	N/A	N/A
Winnebago Landfill	11	\$0.103M Cap. \$0.04M Annual (X30 pcc+11 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+11 operating)	none
Zion Landfill	Closure 2027	N/A	N/A	N/A
Notes: (1) Illinois Landfill Disposal Capacity Report Illinois EPA July 2024 (2) Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal and Destruction from Municipal Wastewater, Biosolids, Landfill Leachate, and Compost Contact Water by Barr May 2023 for Minnesota Pollution Control Agency.				

Table 18 - Part 811 and Part 814 Subpart C			
Name	Groundwater	Leachate	Stormwater
Brickyard LF Unit 2	none	none	none
Chain of Rocks Phase II South (closed 2005)	none	none	none
Clinton Landfill	none	none	none
Cottonwood Hills	none	none	none
DeKalb County – East Unit	none	none	none
Dixon/GROP Landfill Phase III to V (closed July 2002)	none	none	none
LandComp Landfill	none	none	none
Laraway Solid Waste Unit	none	none	none
Lee County Landfill	none	none	none
Livingston Landfill D	none	none	none
North Milam	none	none	none
Orchard Hills	none	none	none
Peoria City/County #2 (closed 2025)	none	none	none
Prairie Hill	none	none	none
Prairie View	none	none	none
River Bend Prairie	none	none	none
Sangamon Valley Landfill Area II	none	none	none
Spoon Ridge LF (Closed May 2011)	none	none	none
Winnebago LF (NEU, WEU NEU)	none	none	none

Table 19- 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
ADS/McLean County Landfill (closed Dec 2018)	\$0.103M Cap. \$0.04M Annual (X23 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X23 pcc)	none
Belleville (Closed Oct 1997)	\$0.103M Cap. \$0.04M Annual	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual	none

Table 19- 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
	(x3 years remaining)	(x3 years remaining)	
Bond 814 Subpart C (closed Oct 2011)	\$0.103M Cap. \$0.04M Annual (x16 years remaining)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (x16 years remaining)	none
Brickyard LF Unit 1	\$0.103M Cap. \$0.04M Annual (X30 pcc+19 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+19 operating)	none
Countryside	\$0.103M Cap. \$0.04M Annual (X30 pcc +2 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc +2 operating)	none
Davis Junction LF (Closed March 2000)	\$0.103M Cap. \$0.04M Annual (x5 years remaining)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (x5 years remaining)	none
DeKalb County – West Unit (closed 2025)	\$0.103M Cap. \$0.04M Annual (X30 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc)	none
Dixon/GROP Landfill Phase II (closed July 2001)	\$0.103M Cap. \$0.04M Annual (x6 years remaining)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (x6 years remaining)	none
Eco Hill Landfill	\$0.103M Cap. \$0.04M Annual (X30 pcc+5 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+5 operating)	none
Envirofil	\$0.103M Cap. \$0.04M Annual (X30 pcc +92 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc +92 operating)	none
Environtech, Inc. (closed November 2016)	\$0.103M Cap. \$0.04M Annual (x21 years remaining)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (x21 years remaining)	none
Envotech-Illinois LF (Litchfield-Hillsboro Landfill)	\$0.103M Cap. \$0.04M Annual (X30 pcc+11 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+11 operating)	none
ERC/Coles Co LF (Closed Oct 2010)	\$0.103M Cap. \$0.04M Annual (x15 years remaining)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (x15 years remaining)	none
Five Oaks	\$0.103M Cap. \$0.04M Annual	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc +22 operating)	none

Table 19- 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
	(X30 pcc +22 operating)		
Greene Valley	\$0.103M Cap. \$0.04M Annual (X4 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X4 pcc)	none
Harbor View Landfill	N/A	N/A	N/A
Hickory Ridge LF	\$0.103M Cap. \$0.04M Annual (X30 pcc+64 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+64 operating)	none
Illinois Landfill	\$0.103M Cap. \$0.04M Annual (30pcc +169 years remaining)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (30pcc +169 years remaining)	none
Indian Creek LF	\$0.103M Cap. \$0.04M Annual (X30 pcc+29 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+29 operating)	none
Kankakee	\$0.103M Cap. \$0.04M Annual (X11 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X11 pcc)	none
Livingston Landfill	\$0.103M Cap. \$0.04M Annual (X30 pcc+11 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+11 operating)	none
Mallard Lake LF (Closed Sep 2002)	\$0.103M Cap. \$0.04M Annual (X77 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X77 pcc)	none
Milam	\$0.103M Cap. \$0.04M Annual (X30 pcc +25 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc +25 operating)	none
Modern FL (Closed December 1998)	\$0.103M Cap. \$0.04M Annual (X3 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X3 pcc)	none
Quad Cities Phase III LF (closed Oct 1999)	\$0.103M Cap. \$0.04M Annual (X4 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X4 pcc)	none
RCS Landfill (closed Oct 2011)	\$0.103M Cap. \$0.04M Annual	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual	none

Table 19- 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
	(X16 pcc)	(X16 pcc)	
Rochelle Municipal	\$0.103M Cap. \$0.04M Annual (X30 pcc+65 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+65 operating)	none
Roxana Landfill LLC	\$0.103M Cap. \$0.04M Annual (X30 pcc+16 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+16 operating)	none
Saline County Landfill (closed July 2007)	\$0.103M Cap. \$0.04M Annual (X12 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X12 pcc)	none
Sangamon Valley Landfill Area I (closed Aug 2010)	\$0.103M Cap. \$0.04M Annual X30 pcc+10 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual X30 pcc+10 operating)	none
Settlers Hill (closed 2007)	\$0.103M Cap. \$0.04M Annual (X12 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X12 pcc)	none
Southern Illinois Regional Landfill Inc	\$0.103M Cap. \$0.04M Annual X30 pcc+39 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual X30 pcc+39 operating)	none
Streator Area LF 3 (Closed Sep 2011)	\$0.103M Cap. \$0.04M Annual (X6 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X6 pcc)	none
Sumner Landfill Inc.	\$0.103M Cap. \$0.04M Annual (X30 pcc+16 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+16 operating)	none
Tazewell (closed 2007)	\$0.103M Cap. \$0.04M Annual (X12 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X12 pcc)	none
Upper Rock Island County LF	\$0.103M Cap. \$0.04M Annual (X30 pcc+14 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+14 operating)	none
Valley View	\$0.103M Cap. \$0.04M Annual (X30 pcc +35 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc +35 operating)	none

Table 19- 814 Subpart D			
Name	Groundwater	Leachate	Stormwater
Wayne County LF	\$0.103M Cap. \$0.04M Annual (X30 pcc+? operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+? operating)	none
West End LF	N/A	N/A	N/A
Wheatland Prairie (closed 2001)	\$0.103M Cap. \$0.04M Annual (X6 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X6 pcc)	none
Winnebago LF (NS Unit)	\$0.103M Cap. \$0.04M Annual (X30 pcc+11 operating)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X30 pcc+11 operating)	none
Woodland (closed 2003)	\$0.103M Cap. \$0.04M Annual (X8 pcc)	\$0.30M–\$0.60M Cap. \$0.23M–\$0.48M Annual (X8 pcc)	none
Cost provided for PFAS leachate treatment in Evaluation of Current Alternatives and Estimated Cost Curves for PFAS Removal and Destruction from Municipal Wastewater, Biosolids, Landfill Leachate, and Compost Contact Water Prepared for Minnesota Pollution Control Agency dated May 2023.			

8. Provide cost breakdowns for PFAS-related remediation efforts for landfills in other states.

RESPONSE:

A breakdown of costs has been discussed in the above sections, with estimated costs included in spreadsheets contained in Appendices A, B, and C attached herein.

III. Additional Considerations

In addition to the responses included in Section II above, I also present the following information for the Board's consideration. The purpose of this testimony is to aid the Board in determining the financial impacts to the solid waste disposal industry (specifically the landfill industry regulated by Parts 811 and 814) by implementation of the new PFAS-constituent groundwater quality standards within 35 Ill. Adm. Code Part 620. As noted above, the Board

requested additional information in eight questions contained in its May 15, 2025, filing. Because the regulatory programs specific to landfill facilities do not currently require the monitoring of PFAS constituents, very limited data exist for current groundwater and leachate quality. Responses to the eight questions are based on likely and expected conditions.

The cost evaluations included:

- a. Groundwater and leachate monitoring;
- b. Confirmation sampling, source evaluations, and alternate source demonstrations;
- c. Derivation of background concentrations;
- d. Assessment monitoring, and rate and extent investigations; and
- e. Design, permitting, installation, and operation of remedial action systems.

As provided in the cost breakdowns, expenses to maintain compliance with Parts 811 and 814 will be significant with incorporation of the changes to Part 620 by reference, particularly those sites constructed pursuant to Part 814, Subpart D.

No sites containing a composite liner system pursuant to Part 811 are expected to show future leachate impacts, as exceedances of groundwater quality standards for municipal solid waste disposal units (leachate seepage through the liner system) have not been attributable to 40 C.F.R. Part 258 Subtitle D liner systems over the 30-plus years of operation. However, contaminant transport modeling required pursuant to 35 Ill. Adm. Code Section 811.317 will, in many cases, result in the failure of the CTM and require costly revisions to the design or incorporation of a contingent remediation plan. Costs for these modifications has been included with the Part 814 Subpart D assessments for \$35,000, but no additional assessment costs have been included in this analysis for the Part 811 and Part 814 Subpart C monitoring.

The implementation of the PFAS standards is expected to impact sites with current permits or legal agreements in place for corrective action, groundwater management zones, enhanced monitoring, etc. These activities may be operating pursuant to compliance commitment agreements, consent orders, Record of Decisions, or other legal agreements. Incorporation of the PFAS-constituent limits is expected to result in re-evaluation and revision of a number of these agreements.

Based on the lack of actual data of the PFAS constituents in the groundwater and leachate, the financial impact to the landfill facilities cannot be fully determined at this time but will be substantial. It is recommended that the Agency evaluate what policies (such as Appendix C to LPC-PA2/LPC-PA19) and existing regulations should be revised prior to implementing the PFAS standards to minimize a significant backlog of data, applications – assessments/alternate source demonstrations, appeals, etc.

IV. Conclusion

The information included herein demonstrates the infeasibility of landfills to comply with the applicable PFAS-related monitoring and corrective action requirements triggered by Part 620 PFAS standards. Thus, the NWRA respectfully requests the Board retain the exemption for Part 811 and Part 814 landfills from Part 620 PFAS provisions under 35 Ill. Adm. Code 620.410(f) and 620.420(e) indefinitely.

The NWRA is committed to closely working with the Agency in the future on a larger rulemaking that would update Parts 811 and 814 for many purposes including PFAS. It is possible that the larger rulemaking may alleviate some of the concerns of the landfill industry. Therefore, in the alternative, the NWRA respectfully requests the Board retain the exemption for Part 811

and Part 814 landfills from Part 620 PFAS provisions under 35 Ill. Adm. Code 620.410(f) and 620.420(e) until the completion of the larger rulemaking.

This concludes my testimony.

Dated: July 25, 2025

**NATIONAL WASTE
& RECYCLING ASSOCIATION**

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Appendix A.1

Potential Cost Increase in Part 814 Subpart D Site Monitoring for Part 620 PFAS Constituents

Part 814 Subpart D Landfills	Years		Wells		Leachate				Stormwater		# Samples	Subtotals
	ops	pcc	ops	pcc	annual-ops	pcc	semi	quarterly	quarterly	pcc		
Belleville (Closed Oct 1997)	0	3	0	18	0	0	1	0	0	0	56	\$21,000
Bond Co. LF (Closed Oct 2011)	0	16	0	10	0	0	1	0	0	0	162	\$60,750
Brickyard LF Unit 1	19	30	23	0	0	0	1	0	0	0	1,604	\$601,500
Countryside	2	30	25	0	0	0	3	0	1	0	876	\$328,500
Davis Junction LF (Closed March 2000)	0	5	21	0	0	0	1	0	0	0	107	\$40,125
DeKalb County – West Unit (closed 2025)	0	30	32	0	0	0	3	0	0	4	982	\$368,250
Dixon/GROP Landfill Phase II (closed July 2001)	0	6	18	0	0	0	1	0	0	0	110	\$41,250
Eco Hill Landfill	5	30	17	0	0	0	1	0	4	0	772	\$289,500
Envirofil	92	30	24	0	0	0	1	13	8	0	13,102	\$4,913,250
Envirotech, Inc. (closed November 2016)	0	21	0	13	0	0	1	0	0	0	275	\$103,125
Envrotech-Illinois LF (Litchfield-Hillsboro Landfill)	11	30	56	0	0	0	2	0	2	0	3,048	\$1,143,000
ERC/Coles Co LF (Closed Oct 2010)	0	14	13	0	0	0	1	0	0	0	184	\$69,000
Five Oaks	22	30	22	2	0	4	1	3	7	0	2,630	\$986,250
Greene Valley	0	4	19	0	0	0	2	1	0	0	84	\$31,500
Hickory Ridge	64	30	24	0	0	0	6	0	4	0	5,596	\$2,098,500
Illinois Landfill	169	30	28	0	0	0	2	0	2	0	12,336	\$4,626,000
Indian Creek	29	30	17	0	0	0	6	0	4	0	2,320	\$870,000
Kankakee	0	11	15	0	2	0	15	0	0	0	197	\$73,875
Livingston Landfill (ABC)	11	30	50	0	0	0	32	0	0	0	3,368	\$1,263,000
Mallard Lake LF (Closed Sep 2002)	0	77	37	0	0	0	2	0	0	0	2,853	\$1,069,875
McLean County Landfill/ADS (closed Dec 2018)	0	23	20	0	0	0	2	0	0	0	464	\$174,000
Milam	25	30	25	0	0	0	3	0	3	0	2,456	\$921,000
Modern FL (Closed December 1998)	0	3	19	0	0	0	1	0	0	0	59	\$22,125
Quad Cities Phase III LF (closed Oct 1999)	0	4	19	0	0	0	2	0	0	0	80	\$30,000
RCS Landfill (closed Oct 2011)	0	16	10	0	0	0	1	0	0	0	162	\$60,750
Rochelle Municipal	65	30	58	0	0	0	3	0	3	0	10,456	\$3,921,000
Roxana Landfill LLC	16	30	57	0	6	0	2	0	4	0	3,960	\$1,485,000
Saline County Landfill (closed July 2007)	0	12	23	0	2	0	1	0	0	0	280	\$105,000
Sangamon Valley Landfill Area I (closed Aug 2010)	10	30	26	0	2	0	1	0	0	0	1,344	\$504,000
Settlers Hill (closed 2007)	0	12	15	0	0	0	3	0	0	0	186	\$69,750
Southern Illinois Regional Landfill Inc	39	30	51	0	2	0	1	0	5	0	6,448	\$2,418,000
Streator Area LF 3 (Closed Sep 2011)	0	6	15	0	2	0	1	0	0	0	94	\$35,250
Sumner Landfill Inc.	16	30	8	0	0	0	1	0	1	0	594	\$222,750
Tazewell (closed 2007)	0	12	17	0	1	0	1	0	0	0	207	\$77,625
Upper Rock Island County LF	14	30	20	0	1	0	2	0	3	0	1,403	\$526,125
Valley View	35	30	47	0	0	0	2	4	3	0	5,840	\$2,190,000
Wayne County LF (1)	0	30	15	0	0	0	1	0	3	0	452	\$169,500
Wheatland Prairie (closed 2001)	0	6	26	0	0	0	3	0	0	0	162	\$60,750
Winnebago LF (NS Unit)	0	30	50	0	0	0	2	0	0	0	1,504	\$564,000
Woodland (closed 2003)	0	8	24	0	0	0	3	0	0	0	198	\$74,250
Total =												\$32,629,125

OPS = Operating Years; PCC = Post Closure Care.

Assume no expansions or PCC after 30 years.

\$375 per sample analyses.

Potential Cost Increase in Part 811 Part 814 Subpart C Site Monitoring for Part 620 PFAS Constituents

	years		Wells		Leachate				stormwater		# Samples	Subtotals
	ops	pcc	ops	pcc	annual-op	pcc	semi	quarterly	quarterly	pcc		
Brickyard LF Unit 2	19	30	18	0	0	0	2	0	4	0	1,608	\$603,000
Chain of Rocks Phase II South (closed 2005)	0	25	0	14	2	0	1	0	0	0	354	\$132,750
Clinton Landfill	48	30	78	0	0	0	6	0	6	0	11,568	\$4,338,000
Cottonwood Hills	74	30	15	0	4	0	0	0	3	0	3,858	\$1,446,750
DeKalb County – East Unit	25	30	19	20	3	6	1	0	4	0	2,656	\$996,000
Dixon/GROP Landfill Phase III to V (closed July 2002)	0	7	0	19	0	0	1	0	0	0	135	\$50,625
LandComp Landfill	22	30	20	11	3	0	0	0	3	0	2,143	\$803,625
Laraway Solid Waste Unit	19	30	41	11	3	0	0	0	7	2	3,710	\$1,391,250
Lee County Landfill	69	30	56	32	3	0	0	0	2	0	11,130	\$4,173,750
Livingston Landfill D	11	30	57	36	0	0	5	0	6	0	4,428	\$1,660,500
North Milam	11	30	75	0	0	0	1	4	3	0	4,248	\$1,593,000
Orchard Hills	7	30	26	0	0	0	2	1	4	0	1,320	\$495,000
Peoria City/County #2 (closed 2025)	0	5	0	21	1	0	1	0	4	0	108	\$40,500
Prairie Hill	55	30	33	7	3	0	0	0	4	0	5,878	\$2,204,250
Prairie View	12	30	21	0	3	0	0	0	4	0	1,365	\$511,875
Sangamon Valley Landfill Area II	10	30	16	4	1	0	0	0	3	0	1,051	\$394,125
Spoon Ridge LF (Closed May 2011)	0	16	0	16	1	0	0	0	0	0	257	\$96,375
Winnebago (NEU, WEU NEU)	11	30	69	9	0	0	6	0	11	0	4,486	\$1,682,250
Total =											\$22,613,625	

OPS = Operating Years; PCC = Post Closure Care.

Assume no expansions or PCC after 30 years.

\$375 per sample analyses.

Part 814 Subpart D Landfills	years		Wells		Cost		Subtotals
	ops	pcc	ops	pcc	Ops	PCC	
Belleville (Closed Oct 1997)	0	3	0	18	\$0	\$13,500	\$58,500
Bond Co. LF (Closed Oct 2011)	0	16	0	10	\$0	\$7,500	\$52,500
Brickyard LF Unit 1	19	30	23	0	\$17,250	\$0	\$62,250
Countryside	2	30	25	0	\$18,750	\$0	\$63,750
Davis Junction LF (Closed March 2000)	0	5	21	0	\$15,750	\$0	\$60,750
DeKalb County – West Unit (closed 2025)	0	30	32	0	\$24,000	\$0	\$69,000
Dixon/GROP Landfill Phase II (closed July 2001)	0	6	18	0	\$13,500	\$0	\$58,500
Eco Hill Landfill	5	30	17	0	\$12,750	\$0	\$57,750
Envirofil	92	30	24	0	\$18,000	\$0	\$63,000
Environtech, Inc. (closed November 2016)	0	21	0	13	\$0	\$9,750	\$54,750
Envotech-Illinois LF (Litchfield-Hillsboro Landfill)	11	30	56	0	\$42,000	\$0	\$87,000
ERC/Coles Co LF (Closed Oct 2010)	0	14	13	0	\$9,750	\$0	\$54,750
Five Oaks	22	30	22	2	\$16,500	\$1,500	\$108,000
Greene Valley	0	4	19	0	\$14,250	\$0	\$59,250
Hickory Ridge	64	30	24	0	\$18,000	\$0	\$63,000
Illinois Landfill	169	30	28	0	\$21,000	\$0	\$66,000
Indian Creek	29	30	17	0	\$12,750	\$0	\$57,750
Kankakee	0	11	15	0	\$11,250	\$0	\$56,250
Livingston Landfill (ABC)	11	30	50	0	\$37,500	\$0	\$82,500
Mallard Lake LF (Closed Sep 2002)	0	77	37	0	\$27,750	\$0	\$72,750
McLean County Landfill/ADS (closed Dec 2018)	0	23	20	0	\$15,000	\$0	\$60,000
Milam	25	30	25	0	\$18,750	\$0	\$63,750
Modern FL (Closed December 1998)	0	3	19	0	\$14,250	\$0	\$59,250
Quad Cities Phase III LF (closed Oct 1999)	0	4	19	0	\$14,250	\$0	\$59,250
RCS Landfill (closed Oct 2011)	0	16	10	0	\$7,500	\$0	\$52,500
Rochelle Municipal	65	30	58	0	\$43,500	\$0	\$88,500
Roxana Landfill LLC	16	30	57	0	\$42,750	\$0	\$87,750
Saline County Landfill (closed July 2007)	0	12	23	0	\$17,250	\$0	\$62,250
Sangamon Valley Landfill Area I (closed Aug 2010)	10	30	26	0	\$19,500	\$0	\$64,500
Settlers Hill (closed 2007)	0	12	15	0	\$11,250	\$0	\$56,250
Southern Illinois Regional Landfill Inc	39	30	51	0	\$38,250	\$0	\$83,250
Streator Area LF 3 (Closed Sep 2011)	0	6	15	0	\$11,250	\$0	\$56,250
Sumner Landfill Inc.	16	30	8	0	\$6,000	\$0	\$51,000
Tazewell (closed 2007)	0	12	17	0	\$12,750	\$0	\$57,750
Upper Rock Island County LF	14	30	20	0	\$15,000	\$0	\$60,000
Valley View	35	30	47	0	\$35,250	\$0	\$80,250
Wayne County LF (1)	0	30	15	0	\$11,250	\$0	\$56,250
Wheatland Prairie (closed 2001)	0	6	26	0	\$19,500	\$0	\$64,500
Winnebago LF (NS Unit)	0	30	50	0	\$37,500	\$0	\$82,500
Woodland (closed 2003)	0	8	24	0	\$18,000	\$0	\$63,000

OPS = Operating Years; PCC = Post Closure Care.

Total = \$2,616,750

Assume no expansions or PCC after 30 years.

\$375 per sample analyses. \$10,000 per permit application. \$35,000 for additional assessment investigation.

Electronic Filing: Received Clerk's Office 07/25/2025

Appendix B.2

Potential Cost Increase in Part 811 and 814 Subpart C Site Assessment for Part 620 PFAS Constituents

	years		Wells		ops cost	pcc costs	subtotal
	ops	pcc	ops	pcc			
Brickyard LF Unit 2	19	30	18	0	\$13,500	\$0	\$23,500
Chain of Rocks Phase II South (closed 2005)	0	25	0	14	\$0	\$10,500	\$20,500
Clinton Landfill	48	30	78	0	\$58,500	\$0	\$68,500
Cottonwood Hills	74	30	15	0	\$11,250	\$0	\$21,250
DeKalb County – East Unit	25	30	19	20	\$14,250	\$15,000	\$49,250
Dixon/GROP Landfill Phase III to V (closed July 2002)	0	7	0	19	\$0	\$14,250	\$24,250
LandComp Landfill	22	30	20	11	\$15,000	\$8,250	\$43,250
Laraway Solid Waste Unit	19	30	41	11	\$30,750	\$8,250	\$59,000
Lee County Landfill	69	30	56	32	\$42,000	\$24,000	\$86,000
Livingston Landfill D	11	30	57	36	\$42,750	\$27,000	\$89,750
North Milam	11	30	75	0	\$56,250	\$0	\$66,250
Orchard Hills	7	30	26	0	\$19,500	\$0	\$29,500
Peoria City/County #2 (closed 2025)	0	5	0	21	\$0	\$15,750	\$25,750
Prairie Hill	55	30	33	7	\$24,750	\$5,250	\$50,000
Prairie View	12	30	21	0	\$15,750	\$0	\$25,750
Sangamon Valley Landfill Area II	10	30	16	4	\$12,000	\$3,000	\$35,000
Spoon Ridge LF (Closed May 2011)	0	16	0	16	\$0	\$12,000	\$22,000
Winnebago (NEU, WEU NEU)	11	30	69	9	\$51,750	\$6,750	\$78,500

OPS = Operating Years; PCC = Post Closure Care.

Total = \$818,000

Assume no expansions or PCC after 30 years.

\$375 per sample analyses. \$10,000 per permit application.

Electronic Filing: Received Clerk's Office 07/25/2025

Estimate of Cost of PFAS-Related Corrective Action for Each Impacted Landfill

		Groundwater Collection		PFAS Treatment Cap.								PFAS Treatment O&M An.							
		Cap.	O&M An.	low (Alt 1a)	median (Alt 1a)	high (Alt 1a)	low (Alt 8a)	median (Alt 8a)	high (Alt 8a)	Republic	Republic (low cap)	low (Alt 1a)	median (Alt 1a)	high (Alt 1a)	low (Alt 8a)	median (Alt 8a)	high (Alt 8a)	Republic	
		Op/PCC years	\$103,000	\$40,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$23,000	\$35,500	\$48,000	\$20,000	\$31,000	\$42,000	\$245,000
Belleville (Closed Oct 1997)	3	\$103,000	\$120,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$69,000	\$106,500	\$144,000	\$60,000	\$93,000	\$126,000	\$735,000	
Bond Co. LF (Closed Oct 2011)	16	\$103,000	\$640,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$368,000	\$568,000	\$768,000	\$320,000	\$496,000	\$672,000	\$3,920,000	
Brickyard LF Unit 1	49	\$103,000	\$1,960,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,127,000	\$1,739,500	\$2,352,000	\$980,000	\$1,519,000	\$2,058,000	\$12,005,000	
Countryside	32	\$103,000	\$1,280,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$736,000	\$1,136,000	\$1,536,000	\$640,000	\$992,000	\$1,344,000	\$7,840,000	
Countryside	32	\$103,000	\$1,280,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$736,000	\$1,136,000	\$1,536,000	\$640,000	\$992,000	\$1,344,000	\$7,840,000	
Davis Junction LF (Closed March 2000)	5	\$103,000	\$200,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$115,000	\$177,500	\$240,000	\$100,000	\$155,000	\$210,000	\$1,225,000	
DeKalb County – West Unit (closed 2025)	30	\$103,000	\$1,200,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$690,000	\$1,065,000	\$1,440,000	\$600,000	\$930,000	\$1,260,000	\$7,350,000	
Dixon/GROP Landfill Phase II (closed July 2001)	6	\$103,000	\$240,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$138,000	\$213,000	\$288,000	\$120,000	\$186,000	\$252,000	\$1,470,000	
Eco Hill Landfill	35	\$103,000	\$1,400,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$805,000	\$1,242,500	\$1,680,000	\$700,000	\$1,085,000	\$1,470,000	\$8,575,000	
Envirofil	122	\$103,000	\$4,880,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$2,806,000	\$4,331,000	\$5,856,000	\$2,440,000	\$3,782,000	\$5,124,000	\$29,890,000	
Envirotech, Inc. (closed November 2016)	21	\$103,000	\$840,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$483,000	\$745,500	\$1,008,000	\$420,000	\$651,000	\$882,000	\$5,145,000	
Envotech-Illinois LF (Litchfield-Hillsboro Landfill)	41	\$103,000	\$1,640,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$943,000	\$1,455,500	\$1,968,000	\$820,000	\$1,271,000	\$1,722,000	\$10,045,000	
ERC/Coles Co LF (Closed Oct 2010)	15	\$103,000	\$600,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$345,000	\$532,500	\$720,000	\$300,000	\$465,000	\$630,000	\$3,675,000	
Five Oaks	52	\$103,000	\$2,080,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,196,000	\$1,846,000	\$2,496,000	\$1,040,000	\$1,612,000	\$2,184,000	\$12,740,000	
Greene Valley	4	\$103,000	\$160,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$92,000	\$142,000	\$192,000	\$80,000	\$124,000	\$168,000	\$980,000	
Hickory Ridge	94	\$103,000	\$3,760,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$2,162,000	\$3,337,000	\$4,512,000	\$1,880,000	\$2,914,000	\$3,948,000	\$23,030,000	
Illinois Landfill	199	\$103,000	\$7,960,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$4,577,000	\$7,064,500	\$9,552,000	\$3,980,000	\$6,169,000	\$8,358,000	\$48,755,000	
Indian Creek	59	\$103,000	\$2,360,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,357,000	\$2,094,500	\$2,832,000	\$1,180,000	\$1,829,000	\$2,478,000	\$14,455,000	
Kankakee	11	\$103,000	\$440,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$253,000	\$390,500	\$528,000	\$220,000	\$341,000	\$462,000	\$2,695,000	
Livingston Landfill	41	\$103,000	\$1,640,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$943,000	\$1,455,500	\$1,968,000	\$820,000	\$1,271,000	\$1,722,000	\$10,045,000	
Mallard Lake LF (Closed Sep 2002)	77	\$103,000	\$3,080,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,771,000	\$2,733,500	\$3,696,000	\$1,540,000	\$2,387,000	\$3,234,000	\$18,865,000	
McLean County Landfill/ADS (closed Dec 2018)	23	\$103,000	\$920,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$529,000	\$816,500	\$1,104,000	\$460,000	\$713,000	\$966,000	\$5,635,000	
Milam	55	\$103,000	\$2,200,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,265,000	\$1,952,500	\$2,640,000	\$1,100,000	\$1,705,000	\$2,310,000	\$13,475,000	
Modern FL (Closed December 1998)	3	\$103,000	\$120,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$69,000	\$106,500	\$144,000	\$60,000	\$93,000	\$126,000	\$735,000	
Quad Cities Phase III LF (closed Oct 1999)	4	\$103,000	\$160,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$92,000	\$142,000	\$192,000	\$80,000	\$124,000	\$168,000	\$980,000	
RCS Landfill (closed Oct 2011)	16	\$103,000	\$640,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$368,000	\$568,000	\$768,000	\$320,000	\$496,000	\$672,000	\$3,920,000	
Rochelle Municipal	95	\$103,000	\$3,800,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$2,185,000	\$3,372,500	\$4,560,000	\$1,900,000	\$2,945,000	\$3,990,000	\$23,275,000	
Roxana Landfill LLC	46	\$103,000	\$1,840,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,058,000	\$1,633,000	\$2,208,000	\$920,000	\$1,426,000	\$1,932,000	\$11,270,000	
Saline County Landfill (closed July 2007)	12	\$103,000	\$480,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$276,000	\$426,000	\$576,000	\$240,000	\$372,000	\$504,000	\$2,940,000	
Sangamon Valley Landfill Area I (closed Aug 2010)	40	\$103,000	\$1,600,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$920,000	\$1,420,000	\$1,920,000	\$800,000	\$1,240,000	\$1,680,000	\$9,800,000	
Settlers Hill (closed 2007)	12	\$103,000	\$480,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$276,000	\$426,000	\$576,000	\$240,000	\$372,000	\$504,000	\$2,940,000	
Southern Illinois Regional Landfill Inc	69	\$103,000	\$2,760,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,587,000	\$2,449,500	\$3,312,000	\$1,380,000	\$2,139,000	\$2,898,000	\$16,905,000	
Streator Area LF 3 (Closed Sep 2011)	6	\$103,000	\$240,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$138,000	\$213,000	\$288,000	\$120,000	\$186,000	\$252,000	\$1,470,000	
Sumner Landfill Inc.	46	\$103,000	\$1,840,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,058,000	\$1,633,000	\$2,208,000	\$920,000	\$1,426,000	\$1,932,000	\$11,270,000	
Tazewell (closed 2007)	12	\$103,000	\$480,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$276,000	\$426,000	\$576,000	\$240,000	\$372,000	\$504,000	\$2,940,000	
Upper Rock Island County LF	44	\$103,000	\$1,760,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,693,236	\$1,012,000	\$1,562,000	\$2,112,000	\$880,000	\$1,364,000	\$1,848,000	\$10,780,000	
Valley View	65	\$103,000	\$2,600,000	\$300,000	\$450,000	\$600,000	\$5,000,000	\$8,000,000	\$11,000,000	\$3,893,236	\$2,6								

OPS = Operating Years; PCC = Post Closure Care.
Assume no expansions or PCC after 30 years.

*In the Matter of Proposed Amendments to
Groundwater Quality (35 Ill. Adm. Code 620)
for Landfills under 35 Ill. Adm. Code 811, 814
Pollution Control Board No. R2022-018(A)*

CERTIFICATE OF SERVICE

Scott B. Sievers of the law firm of Brown, Hay + Stephens, LLP herein certifies that on July 25, 2025, from Springfield, Illinois, he electronically submitted for filing the foregoing **TESTIMONY OF ERIC BALLENGER ON BEHALF OF NATIONAL WASTE & RECYCLING ASSOCIATION** with the Pollution Control Board by using the Clerk's Office On-Line (COOL) eFile system. Scott B. Sievers further certifies that, on July 25, 2025, he served the other parties in this case with a copy of the foregoing document by transmitting the documents by e-mail to those on the attached service list.

Dated: July 25, 2025

By: s/Scott B. Sievers
Scott B. Sievers

BROWN, HAY & STEPHENS, LLP

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