

PFAS ACTION ACT OF 2021

JULY 13, 2021.—Ordered to be printed

Mr. PALLONE, from the Committee on Energy and Commerce,
submitted the following

R E P O R T

together with

DISSENTING VIEWS

[To accompany H.R. 2467]

The Committee on Energy and Commerce, to whom was referred the bill (H.R. 2467) to require the Administrator of the Environmental Protection Agency to designate per- and polyfluoroalkyl substances as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

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I. PURPOSE AND SUMMARY

H.R. 2467, the “PFAS Action Act of 2021”, requires comprehensive regulation of per- and polyfluoroalkyl substances (PFAS) under landmark environmental laws. For two PFAS, perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), the bill requires the U.S. Environmental Protection Agency (EPA) Administrator (the Administrator) to immediately list the chemicals as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and hazardous air pollutants under the Clean Air Act (CAA). For all other PFAS, the bill requires the Administrator to develop testing requirements, which will vary based on appropriate subgroups determined by the Administrator, to generate health and safety data which will inform later regulatory decisions. The bill requires the Administrator to use that data to determine whether other PFAS should be listed as hazardous substances under CERCLA and hazardous air pollutants under the CAA within five years. In addition, the bill establishes a health-protective drinking water standard for PFOA and PFOS, limits the introduction of new PFAS chemicals while test data is being developed, requires guidance for safe disposal of PFAS, and authorizes assistance to drinking water utilities treating PFAS contamination. H.R. 2467 also establishes a voluntary label for PFAS-free products, creates a public website containing information on household well water testing, mandates development of a PFAS risk-communication strategy, and provides guidance to first responders to minimize their risk from PFAS chemicals.

In the 116th Congress, H.R. 2467 passed the House on January 10, 2020, as H.R. 535, the “PFAS Action Act of 2019”.

II. BACKGROUND AND NEED FOR LEGISLATION

PFAS are a group of man-made chemicals that have been manufactured since the 1940s.¹ PFAS have been found in many common products, including firefighting foam, non-stick cookware, water resistant clothing, cleaning products, paints and sealants, personal care products, and cosmetics.² The carbon-fluorine bonds in PFAS are extremely stable, causing the chemicals to accumulate and persist in the environment.³ In addition, PFAS have been shown to bioaccumulate, meaning that after someone is exposed to PFAS, detectable levels can be found in that person long after the initial exposure. PFAS exposure has been linked to severe adverse health impacts, including high cholesterol, thyroid disease, pregnancy-induced hypertension, ulcerative colitis, and kidney and testicular

¹ U.S. Environmental Protection Agency, *Basic Information on PFAS* (updated Apr. 6, 2021) (www.epa.gov/pfas/basic-information-pfas).

² Centers for Disease Control and Prevention, Agency for Toxic Substances and Disease Registry, *Per- and Polyfluoroalkyl Substances (PFAS) and Your Health* (reviewed June 24, 2020) (www.atsdr.cdc.gov/pfas/health-effects/exposure.html?CDC_AA_refVal=https%3A%2F%2Fwww.atsdr.cdc.gov%2Fpfas%2Fpfas-exposure.html).

³ Elsie M. Sunderland, et al, *A Review of the Pathways of Human Exposure to Poly- and Perfluoroalkyl Substances (PFASs) and Present Understanding of Health Effects*, *Journal of Exposure Science & Environmental Epidemiology* (Nov. 23, 2018).

cancer.⁴ In a 2007 study, PFOS and PFOA were detected in over 98 percent of samples taken across the United States.⁵

Although PFOA and PFOS have been voluntarily phased out by most manufacturers,⁶ thousands of PFAS formulations continue to be produced. Only a small percentage of those have been reviewed, and the majority of those reviewed have required restrictions.⁷

Between 1951 and 2003, DuPont dumped and emitted over 1.7 million pounds of PFOA in West Virginia.⁸ In 2002, EPA ordered DuPont to provide alternative drinking water for residents near the Washington Works facility in Washington, West Virginia.⁹ PFOA was one of the hazardous contaminants found in the community's drinking water. This drinking water crisis focused national attention on PFAS exposures and their potential health risks.

PFAS may be released into the air, soil, and water.¹⁰ The Safe Drinking Water Act (SDWA) mandates EPA set standards for naturally-occurring and man-made contaminants in the nation's public water supply, and requires public water system operators or owners to comply with these standards.¹¹ Under the SDWA Amendments of 1996, EPA has the authority to set drinking water standards.¹² Drinking water standards include two primary components: a maximum contaminant level goal (MCLG) and either a maximum contaminant level (MCL) or treatment technique. Although EPA has issued a health advisory for PFOA and PFOS,¹³ there are currently no federal MCLs established for PFAS. H.R. 2467 would direct the Administrator to promulgate a drinking water standard for PFAS to protect Americans across the nation from PFAS contamination found in their drinking water.

The Toxic Substances Control Act (TSCA), as amended by the Frank R. Lautenberg Chemical Safety for the 21st Century Act in 2016, provides EPA with the authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances.¹⁴ Since 2006, EPA has reviewed 294 new PFAS and placed restrictions on 191.¹⁵ Since there are thousands of known PFAS, H.R. 2467 is needed to require EPA to conduct comprehensive testing of all PFAS chemicals, not just a select several hundred.

⁴*Id.*

⁵Antonia M. Calafat, et al., *Polyfluoroalkyl Chemicals in the U.S. Population: Data from the National Health and Nutrition Examination Survey (NHANES) 2003–2004 and Comparisons with NHANES 1999–2000*, Environmental Health Perspectives (Nov. 1, 2007).

⁶U.S. Environmental Protection Agency, PFOA Stewardship Program (www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-20102015-pfoa-stewardship-program) (updated Mar. 4, 2021).

⁷U.S. Environmental Protection Agency, PFAS Laws and Regulations (www.epa.gov/pfas/pfas-laws-and-regulations).

⁸*Ohio River Communities are Still Coping with Teflon's Toxic Legacy*, The Allegheny Front (Oct. 28, 2016).

⁹U.S. Environmental Protection Agency, *E.I. DuPont de Nemours and Company PFOA Settlements* (www.epa.gov/enforcement/ei-dupont-de-nemours-and-company-pfoa-settlements) (accessed July 8, 2021).

¹⁰See note 1.

¹¹42 U.S.C. § 300f.

¹²U.S. Environmental Protection Agency, *Summary of the Safe Drinking Water Act* (www.epa.gov/laws-regulations/summary-safe-drinking-water-act) (updated Aug. 3, 2020).

¹³U.S. Environmental Protection Agency, *Drinking Water Health Advisories for PFOA and PFOS* (www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos) (updated Feb. 18, 2021).

¹⁴U.S. Environmental Protection Agency, *Summary of the Toxic Substances Control Act* (www.epa.gov/laws-regulations/summary-toxic-substances-control-act) (updated Sept. 9, 2020).

¹⁵*Id.*

CERCLA, commonly referred to as “Superfund,” granted EPA authority to address the release of hazardous substances. CERCLA does this by requiring that cleanup actions protect both public health and the environment.¹⁶ Currently, PFAS are not listed as hazardous substances under Superfund, which limits EPA’s and states’ authority to clean up related pollution and contamination. H.R. 2467 would direct the Administrator to list PFAS as hazardous substances under CERCLA, allowing communities that have been impacted by PFAS contamination to receive adequate resources and funding for cleanup and continued monitoring.

The CAA requires EPA to regulate toxic air pollutants.¹⁷ Currently, PFAS air emissions are not regulated under the CAA, despite demonstrated health and environmental risks.¹⁸ H.R. 2467 directs the Administrator to promulgate a rule adding PFOA, PFOS and their respective salts to the list of hazardous air pollutants under the CAA. This action would protect residents across the United States from toxic air pollution caused by PFAS emissions.

There is a clear and demonstrated need for legislation to stem the flow of PFAS pollution into the environment, consumer products, and human bodies. This legislation would address PFAS pollution in the air, land, and water, protecting public health and the environment.

III. COMMITTEE HEARINGS

For the purposes of section 3(c) of rule XIII of the Rules of the House of Representatives, the following hearings were used to develop or consider H.R. 2467:

The Subcommittee on Environment and Climate Change held a hearing on April 29, 2021. The hearing was entitled “The Fiscal Year 2022 EPA Budget.” The Subcommittee received testimony from the following witness:

- Michael S. Regan, Administrator, U.S. Environmental Protection Agency.

The Subcommittee on Environment and Climate Change held a legislative hearing on May 25, 2021. The hearing was entitled, “The CLEAN Future Act and Drinking Water: Legislation to Ensure Drinking Water is Safe and Clean.” Legislation discussed at that hearing included two sections of H.R. 2467. The Subcommittee received testimony from the following witness:

- Jennifer McLain, Ph.D., Director, Office of Ground Water and Drinking Water, U.S. Environmental Protection Agency.

The Subcommittee on Environment and Climate Change held a hearing on July 28, 2020. The hearing was entitled “There’s Something in the Water: Reforming Our Nation’s Drinking Water Standards.” The Subcommittee received testimony from the following witnesses:

- Shellie Chard, Director, Water Quality Division, Oklahoma Department of Environmental Quality, on behalf of Association of State Drinking Water Administrators;
- Diane VanDe Hei, Chief Executive Officer, Association of Metropolitan Water Agencies; and

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ Agency for Toxic Substances and Disease Registry and U.S. Environmental Protection Agency, *Toxicological Profile for Perfluoroalkyls: Draft for Public Comment* (Jun. 2018).

- Mae Wu, Senior Director, Health and Food, Healthy People and Thriving Communities Program, Natural Resources Defense Council.

The Subcommittee on Environment and Climate Change held a legislative hearing on May 15, 2019. The hearing was entitled “Protecting Americans at Risk of PFAS Contamination and Exposure.” That hearing covered the version of the PFAS Action Act introduced in the 116th Congress. The Subcommittee received testimony from the following witnesses:

- Erik D. Olson, Health Program Director, Natural Resources Defense Council;
- Jamie DeWitt, Ph.D., D.A.B.T., Associate Professor, Department of Pharmacology and Toxicology, Brody School of Medicine, East Carolina University;
- Emily Marpe, Mother and Community Member, Petersburg, New York;
- Brian Steglitz, P.E., Manager, Water Treatment Services, City of Ann Arbor, Michigan;
- Tracy Mehan, Executive Director, Government Affairs, American Water Works Association; and
- Jane C. Luxton, Partner, Co-Chair of the Environmental and Administrative Law Practice, Lewis Brisbois.

IV. COMMITTEE CONSIDERATION

H.R. 2467, the “PFAS Action Act of 2021”, was introduced on April 13, 2021, by Representative Dingell (D–MI) and 26 other original cosponsors and was referred to the Committee on Energy and Commerce. It was then referred to the Subcommittee on Environment and Climate Change on April 14, 2021.

The Subcommittee on Environment and Climate Change met in virtual open markup session, pursuant to notice, to consider H.R. 2467 and two other bills on June 16, 2021. The Subcommittee ordered H.R. 2467 reported favorably to the full Committee, without amendment, by a roll call vote: 16 yeas to 7 nays (*ECC Roll Call no. 04*).

The full Committee met in hybrid open markup session, pursuant to notice, to consider H.R. 2467 and two other bills on June 23, 2021. During consideration of the bill, an amendment offered by Representative Bucshon (R–IN) was defeated by a roll call vote: 24 yeas to 32 nays (*Roll call no. 34*). An amendment offered by Representative Walberg (R–MI) was defeated by a roll call vote: 21 yeas to 35 nays (*Roll call no. 35*). An amendment offered by Representative Crenshaw (R–TX) was defeated by a roll call vote: 24 yeas to 31 nays (*Roll call no. 36*). An amendment offered by Representative Bilirakis (R–FL) was defeated by a roll call vote: 23 yeas to 29 nays (*Roll call no. 37*). An amendment offered by Representative Armstrong (R–ND) was defeated by a roll call vote: 23 yeas to 31 nays (*Roll call no. 38*). An amendment offered by Representative Johnson (R–OH) was defeated by a roll call vote: 20 yeas to 30 nays (*Roll call no. 39*). An amendment offered by Representative Lesko (R–AZ) was defeated by a roll call vote: 21 yeas to 31 nays (*Roll call no. 40*). An amendment offered by Representative Carter (R–GA) was defeated by a roll call vote: 21 yeas to 31 nays (*Roll call no. 41*). An amendment offered by Representative McKinley (R–WV) was defeated by a roll call vote: 22 yeas to 30

nays (*Roll call no. 42*). Representative Pallone, Chairman of the committee, offered a motion to order H.R. 2467 reported favorably to the House, without amendment. The motion on final passage was agreed to by a roll call vote of 33 yeas to 20 nays (*Roll call no. 43*), a quorum being present.

V. COMMITTEE VOTES

Clause 3(b) of rule XIII of the Rules of the House of Representatives requires the Committee to list each record vote on the motion to report legislation and amendments thereto. The Committee advises that there were 11 record votes taken on H.R. 2467, including a motion by Mr. Pallone ordering H.R. 2467 favorably reported to the House, without amendment. The motion on final passage of the bill was approved by a record vote of 33 yeas to 20 nays. The following are the record votes taken during Committee consideration, including the names of those members voting for and against:

Committee on Energy and Commerce
117th Congress

Subcommittee on Environment and Climate Change

(ratio: 14-10)

ROLL CALL VOTE #4

Bill: **H.R. 2467**, the "PFAS Action Act of 2021"

Motion: A motion by Mr. Tonko of New York to order **H.R. 2467** transmitted favorably to the full committee, without amendment

Disposition: **AGREED TO** by a roll call vote of 16 yeas to 7 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Tonko	X			Mr. McKinley	X		
Ms. DeGette	X			Mr. Johnson		X	
Ms. Schakowsky	X			Mr. Mullin		X	
Mr. Sarbanes	X			Mr. Hudson	X		
Ms. Clarke	X			Mr. Carter		X	
Mr. Ruiz	X			Mr. Duncan		X	
Mr. Peters	X			Mr. Palmer		X	
Mrs. Dingell	X			Mr. Curtis		X	
Ms. Barragán	X			Mr. Crenshaw			
Mr. McEachin	X			Mrs. Rodgers		X	
Ms. Blunt Rochester	X						
Mr. Soto	X						
Mr. O'Halleran	X						
Mr. Pallone	X						

Committee on Energy and Commerce
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Full Committee
(ratio: 32-26)

ROLL CALL VOTE #34

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_014), offered by Mr. Bucshon of Indiana, No. 1

Disposition: **NOT AGREED TO** by a roll call vote of 24 yeas to 32 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush		X		Mr. Upton	X		
Ms. Eshoo		X		Mr. Burgess	X		
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger	X		
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin			
Mr. Schrader	X			Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn	X		
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce			
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran		X					
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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(ratio: 32-26)

ROLL CALL VOTE #35

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_10), offered by Mr. Walberg of Michigan, No. 2

Disposition: **NOT AGREED TO** by a roll call vote of 21 yeas to 35 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush		X		Mr. Upton		X	
Ms. Eshoo		X		Mr. Burgess	X		
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley		X	
Ms. Matsui		X		Mr. Kinzinger	X		
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin			
Mr. Schrader		X		Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn	X		
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce			
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran		X					
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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Full Committee
(ratio: 32-26)

ROLL CALL VOTE #36

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_018), offered by Mr. Crenshaw of Texas, No. 3

Disposition: **NOT AGREED TO** by a roll call vote of 24 yeas to 31 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush		X		Mr. Upton	X		
Ms. Eshoo		X		Mr. Burgess	X		
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger			
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin			
Mr. Schrader	X			Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn	X		
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce	X		
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran		X					
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan							
Ms. Fletcher		X					

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ROLL CALL VOTE #37

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_017), offered by Mr. Bilirakis of Florida, No. 4

Disposition: **NOT AGREED TO** by a roll call vote of 23 yeas to 29 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush		X		Mr. Upton	X		
Ms. Eshoo		X		Mr. Burgess			
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger	X		
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bueshon	X		
Ms. Clarke		X		Mr. Mullin			
Mr. Schrader	X			Mr. Hudson		X	
Mr. Cárdenas				Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan			
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn	X		
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin				Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce	X		
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran							
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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ROLL CALL VOTE #38

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_011), offered by Mr. Armstrong of North Dakota, No. 5

Disposition: **NOT AGREED TO** by a roll call vote of 23 yeas to 31 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush		X		Mr. Upton			
Ms. Eshoo				Mr. Burgess			
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger	X		
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin	X		
Mr. Schrader		X		Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn	X		
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce	X		
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran							
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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ROLL CALL VOTE #39

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_013), offered by Mr. Johnson of Ohio, No. 6

Disposition: **NOT AGREED TO** by a roll call vote of 20 yeas to 30 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush				Mr. Upton	X		
Ms. Eshoo				Mr. Burgess			
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger			
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin	X		
Mr. Schrader		X		Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg			
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn			
Ms. Kuster		X		Mr. Curtis			
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce	X		
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran							
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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Committee on Energy and Commerce
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Full Committee
(ratio: 32-26)

ROLL CALL VOTE #40

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_012), offered by Ms. Lesko of Arizona, No. 7

Disposition: **NOT AGREED TO** by a roll call vote of 21 yeas to 31 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush				Mr. Upton	X		
Ms. Eshoo				Mr. Burgess			
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger			
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin	X		
Mr. Schrader		X		Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn			
Ms. Kuster		X		Mr. Curtis			
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce	X		
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran		X					
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

06/23/21

Committee on Energy and Commerce
117th Congress

Full Committee

(ratio: 32-26)

ROLL CALL VOTE #41

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_016), offered by Mr. Carter of Georgia, No. 8

Disposition: **NOT AGREED TO** by a roll call vote of 21 yeas to 31 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush				Mr. Upton	X		
Ms. Eshoo				Mr. Burgess			
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger			
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis	X		
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bucshon	X		
Ms. Clarke		X		Mr. Mullin	X		
Mr. Schrader		X		Mr. Hudson		X	
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn			
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce			
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran		X					
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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Committee on Energy and Commerce
117th Congress

Full Committee
(ratio: 32-26)

ROLL CALL VOTE #42

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Amendment: An amendment (2467_01), offered by Mr. McKinley of West Virginia, No. 9

Disposition: **NOT AGREED TO** by a roll call vote of 22 yeas to 30 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone		X		Mrs. Rodgers	X		
Mr. Rush				Mr. Upton	X		
Ms. Eshoo				Mr. Burgess			
Ms. DeGette		X		Mr. Scalise	X		
Mr. Doyle		X		Mr. Latta	X		
Ms. Schakowsky		X		Mr. Guthrie	X		
Mr. Butterfield		X		Mr. McKinley	X		
Ms. Matsui		X		Mr. Kinzinger			
Ms. Castor		X		Mr. Griffith	X		
Mr. Sarbanes		X		Mr. Bilirakis			
Mr. McNerney		X		Mr. Johnson	X		
Mr. Welch		X		Mr. Long	X		
Mr. Tonko		X		Mr. Bueshon	X		
Ms. Clarke		X		Mr. Mullin			
Mr. Schrader		X		Mr. Hudson	X		
Mr. Cárdenas		X		Mr. Walberg	X		
Mr. Ruiz		X		Mr. Carter	X		
Mr. Peters		X		Mr. Duncan	X		
Mrs. Dingell		X		Mr. Palmer	X		
Mr. Veasey		X		Mr. Dunn	X		
Ms. Kuster		X		Mr. Curtis	X		
Ms. Kelly		X		Ms. Lesko	X		
Ms. Barragán		X		Mr. Pence	X		
Mr. McEachin		X		Mr. Crenshaw	X		
Ms. Blunt Rochester		X		Mr. Joyce	X		
Mr. Soto		X		Mr. Armstrong	X		
Mr. O'Halleran		X					
Ms. Rice		X					
Ms. Craig		X					
Ms. Schrier		X					
Ms. Trahan		X					
Ms. Fletcher		X					

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Committee on Energy and Commerce
117th Congress

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(ratio: 32-26)

ROLL CALL VOTE #43

Bill: H.R. 2467, the "PFAS Action Act of 2021"

Motion: A motion by Mr. Pallone of New Jersey to order **H.R. 2467** transmitted favorably to the House, without amendment (Final Passage)

Disposition: **AGREED TO** by a roll call vote of 33 yeas to 20 nays

REPRESENTATIVE	YEAS	NAYS	PRESENT	REPRESENTATIVE	YEAS	NAYS	PRESENT
Mr. Pallone	X			Mrs. Rodgers		X	
Mr. Rush				Mr. Upton	X		
Ms. Eshoo				Mr. Burgess			
Ms. DeGette	X			Mr. Scalise		X	
Mr. Doyle	X			Mr. Latta		X	
Ms. Schakowsky	X			Mr. Guthrie		X	
Mr. Butterfield	X			Mr. McKinley	X		
Ms. Matsui	X			Mr. Kinzinger			
Ms. Castor	X			Mr. Griffith		X	
Mr. Sarbanes	X			Mr. Bilirakis		X	
Mr. McNerney	X			Mr. Johnson		X	
Mr. Welch	X			Mr. Long		X	
Mr. Tonko	X			Mr. Bucshon		X	
Ms. Clarke	X			Mr. Mullin			
Mr. Schrader	X			Mr. Hudson	X		
Mr. Cárdenas	X			Mr. Walberg		X	
Mr. Ruiz	X			Mr. Carter		X	
Mr. Peters	X			Mr. Duncan		X	
Mrs. Dingell	X			Mr. Palmer		X	
Mr. Veasey	X			Mr. Dunn		X	
Ms. Kuster	X			Mr. Curtis		X	
Ms. Kelly	X			Ms. Lesko		X	
Ms. Barragán	X			Mr. Pence		X	
Mr. McEachin	X			Mr. Crenshaw		X	
Ms. Blunt Rochester	X			Mr. Joyce		X	
Mr. Soto	X			Mr. Armstrong		X	
Mr. O'Halleran	X						
Ms. Rice	X						
Ms. Craig	X						
Ms. Schrier	X						
Ms. Trahan	X						
Ms. Fletcher	X						

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VI. OVERSIGHT FINDINGS

Pursuant to clause 3(c)(1) of rule XIII and clause 2(b)(1) of rule X of the Rules of the House of Representatives, the oversight findings and recommendations of the Committee are reflected in the descriptive portion of the report.

VII. NEW BUDGET AUTHORITY, ENTITLEMENT AUTHORITY, AND TAX EXPENDITURES

Pursuant to 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

The Committee has requested but not received from the Director of the Congressional Budget Office a statement as to whether this bill contains any new budget authority, spending authority, credit authority, or an increase or decrease in revenues or tax expenditures.

VIII. FEDERAL MANDATES STATEMENT

The Committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

IX. STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause 3(c)(4) of rule XIII, the general performance goal or objective of this legislation is to protect public and environmental health by requiring the EPA Administrator to issue comprehensive regulations and guidance for the testing, treatment, cleanup, and disposal of PFAS.

X. DUPLICATION OF FEDERAL PROGRAMS

Pursuant to clause 3(c)(5) of rule XIII, no provision of H.R. 2467 is known to be duplicative of another Federal program, including any program that was included in a report to Congress pursuant to section 21 of Public Law 111-139 or the most recent Catalog of Federal Domestic Assistance.

XI. COMMITTEE COST ESTIMATE

Pursuant to clause 3(d)(1) of rule XIII, the Committee adopts as its own the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

XII. EARMARKS, LIMITED TAX BENEFITS, AND LIMITED TARIFF BENEFITS

Pursuant to clause 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 2467 contains no earmarks, limited tax benefits, or limited tariff benefits.

XIII. ADVISORY COMMITTEE STATEMENT

No advisory committee within the meaning of section 5(b) of the Federal Advisory Committee Act was created by this legislation.

XIV. APPLICABILITY TO LEGISLATIVE BRANCH

The Committee finds that the legislation does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act.

XV. SECTION-BY-SECTION ANALYSIS OF THE LEGISLATION

Section 1. Short title

Section 1 designates that the short title may be cited as the “PFAS Action Act of 2021”.

Sec. 2. Designation as hazardous substances

Section 2 requires the Administrator to designate PFOA and PFOS as hazardous substances under CERCLA, frequently referred to as “Superfund.” The bill also requires EPA to review all other PFAS chemicals over a five-year period and decide whether to list them under Superfund.

Listing these substances under Superfund will spur the cleanup of PFOA and PFOS pollution nationwide and make CERCLA funds available for such cleanups. It will not ban PFOA or PFOS, as CERCLA listing is not a ban. The same will be true for any future PFAS listed under CERCLA pursuant to this section. CERCLA governs only releases of hazardous substances to the environment; it does not restrict the sale, use, or disposal of listed substances.

This section includes a narrow exemption from CERCLA liability for the owners and operators of airports using PFAS firefighting foam pursuant to federal requirements for the use of such foam, so long as all regulations for safe handling are followed.

Sec. 3. Testing of perfluoroalkyl and polyfluoroalkyl substances

Section 3 requires the Administrator to promulgate a test rule under TSCA Section 4 to require comprehensive testing of all PFAS chemicals. EPA is instructed to identify relevant subclasses of PFAS and tailor testing requirements to those subclasses.

Sec. 4. Manufacturing and processing notices for perfluoroalkyl and polyfluoroalkyl substances

Section 4 establishes a five-year moratorium on the introduction of new PFAS into commerce under TSCA Section 5 while test data for existing PFAS is developed. The Committee intends this period to allow for the development of a robust data set on PFAS health effects, to inform future reviews of new PFAS. This section also prohibits the introduction into commerce of PFAS chemicals under review-exemptions such as the low volume exemption (LVE). Because PFAS are persistent and bioaccumulative, PFAS produced at low volumes are not necessarily safe. EPA recently announced a

new policy prohibiting the introduction of new PFAS under LVEs,¹⁹ consistent with this section.

The moratorium under this section will have no effect on the sale or use of drugs or medical devices, as drugs and medical devices are exempt from all regulations under TSCA.

Sec. 5. National primary drinking water regulations for PFAS

Section 5 requires EPA to promulgate a drinking water standard for PFAS that is protective of the health of vulnerable and disproportionately exposed subpopulations. The standard would cover PFOA and PFOS at a minimum and could cover additional PFAS at the discretion of the Administrator.

Sec. 6. Enforcement

Section 6 provides a five-year grace period during which no financial penalties will be assessed for water systems that violate the PFAS drinking water standard promulgated under Section 5. This grace period is intended to provide time for water systems to implement necessary treatment changes to come into compliance with the standard promulgated pursuant to Section 5.

Sec. 7. Establishment of PFAS infrastructure grant program

Section 7 creates a new grant program to provide financial support to drinking water systems that need to implement treatment changes to remove PFAS from their finished water. The section authorizes \$550 million over fiscal year (FY) 2022 through 2026 for the program.

Sec. 8. Listing of perfluoroalkyl and polyfluoroalkyl substances as hazardous air pollutants

Section 8 directs the Administrator to promulgate a rule adding PFOA and its salts and PFOS and its salts to the list of hazardous air pollutants under the CAA. This section would also set a five-year deadline for EPA to determine whether other PFAS should be listed as hazardous air pollutants. Lastly, this section sets a one-year deadline for EPA to issue a rule identifying major source categories of PFAS under the CAA.

Sec. 9. Prohibition on unsafe waste incineration on PFAS

Section 9 requires the Administrator to promulgate regulations under Subtitle C of the Solid Waste Disposal Act (commonly referred to as the Resource Conservation and Recovery Act, or RCRA) to prohibit incineration of materials containing PFAS or aqueous film forming foam if the incineration violates the CAA or fails to eliminate the PFAS in the material. The Committee is aware of concerns from the hazardous waste incinerator industry that current incineration technology cannot eliminate PFAS in the material. However, incineration which fails to eliminate the PFAS will disperse PFAS pollution into the environment. This section is intended to spur the development of new and improved incineration technology to prevent that pollution.

¹⁹U.S. Environmental Protection Agency, *EPA Announces Changes to Prevent Unsafe New PFAS from Entering the Market* (Apr. 27, 2021) (press release).

Sec. 10. Label for PFAS-free products

Section 10 directs the Administrator to revise the Safer Choice Standard of the Safer Choice Program to develop a voluntary PFAS-free label for cookware and other consumer products. The products include pots, pans, cooking utensils, carpets, rugs, clothing, upholstered furniture, and stain, water, or grease resistant coatings that do not contain PFAS.

Sec. 11. Guidance on minimizing the use of firefighting foam and other related equipment containing any PFAS

Section 11 requires the Administrator, in consultation with the head of the U.S. Fire Administration, Federal Aviation Administration, and other relevant Federal agencies, to issue guidance for first responders to minimize their exposure to firefighting foam and other related equipment that contain PFAS chemicals. Covered first responders may include firefighters, police officers, paramedics, emergency medical technicians, and others.

Sec. 12. Investigation of prevention of contamination by GenX

Section 12 directs the Administrator to investigate methods and means to prevent contamination of surface waters, including source waters used for drinking water purposes, by a group of ten PFAS known as GenX.

Sec. 13. Disclosure of introductions of PFAS

Section 13 prohibits owners or operators of industrial facilities that emit wastewater under the Federal Water Pollution Control Act (commonly known as the Clean Water Act) from including PFAS in their effluent without prior disclosure to the relevant water treatment works. The owner or operator of the industrial source must notify the owner or operator of the applicable treatment works of the identity of the PFAS, whether the PFAS are susceptible to treatment by the treatment works, and whether the PFAS would interfere with the operation of the treatment works.

Sec. 14. Household well water testing website

Section 14 directs the Administrator, in coordination with the Secretary of Health and Human Services, the Secretary of Agriculture, and appropriate State agencies, to establish a website containing information relating to the testing of household well water.

Sec. 15. Risk-communication strategy

Section 15 directs the Administrator to develop a risk-communication strategy to inform the public about the hazards of PFAS. The strategy would include dissemination of information about the risks posed by PFAS in land, air, water, and products, notification of the public about exposure pathways and mitigation measures, and consultation with States that have demonstrated effective risk-communication strategies for best practices.

Sec. 16. Assistance to Territories for addressing emerging contaminants, with a focus on perfluoroalkyl and polyfluoroalkyl substances

Section 16 makes U.S. territories eligible for financial assistance designated for addressing emerging contaminants, including PFAS.

Sec. 17. Clean Water Act effluent standards, pretreatment standards, and water quality criteria for PFAS

Section 17 directs the Administrator to promulgate a rule under the Federal Water Pollution Control Act establishing effluent limitations and pretreatment standards for the introduction or discharge of PFAS. This section authorizes \$200 million per year from FY 2022 through 2026 for a grant program that provides financial assistance to owners and operators of publicly owned treatment works to implement a PFAS pretreatment standard.

XVI. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, and existing law in which no change is proposed is shown in roman):

TOXIC SUBSTANCES CONTROL ACT

* * * * *

TITLE I—CONTROL OF TOXIC SUBSTANCES

* * * * *

SEC. 4. TESTING OF CHEMICAL SUBSTANCES AND MIXTURES.

(a) TESTING REQUIREMENTS.—(1) If the Administrator finds that—

(A)(i)(I) the manufacture, distribution in commerce, processing, use, or disposal of a chemical substance or mixture, or that any combination of such activities, may present an unreasonable risk of injury to health or the environment,

(II) there is insufficient information and experience upon which the effects of such manufacture, distribution in commerce, processing, use, or disposal of such substance or mixture or of any combination of such activities on health or the environment can reasonably be determined or predicted, and

(III) testing of such substance or mixture with respect to such effects is necessary to develop such information; or

(ii)(I) a chemical substance or mixture is or will be produced in substantial quantities, and (aa) it enters or may reasonably be anticipated to enter the environment in substantial quantities or (bb) there is or may be significant or substantial human exposure to such substance or mixture,

(II) there is insufficient information and experience upon which the effects of the manufacture, distribution in commerce, processing, use, or disposal of such substance or mixture or of any combination of such activities on health or the environment can reasonably be determined or predicted, and

(III) testing of such substance or mixture with respect to such effects is necessary to develop such information; and

(B) in the case of a mixture, the effects which the mixture's manufacture, distribution in commerce, processing, use, or disposal or any combination of such activities may have on health or the environment may not be reasonably and more efficiently

determined or predicted by testing the chemical substances which comprise the mixture; the Administrator shall by rule, or, in the case of a chemical substance or mixture described in subparagraph (A)(i), by rule, order, or consent agreement, require that testing be conducted on such substance or mixture to develop information with respect to the health and environmental effects for which there is an insufficiency of information and experience and which is relevant to a determination that the manufacture, distribution in commerce, processing, use, or disposal of such substance or mixture, or that any combination of such activities, does or does not present an unreasonable risk of injury to health or the environment.

(2) **ADDITIONAL TESTING AUTHORITY.**—In addition to the authority provided under paragraph (1), the Administrator may, by rule, order, or consent agreement—

(A) require the development of new information relating to a chemical substance or mixture if the Administrator determines that the information is necessary—

(i) to review a notice under section 5 or to perform a risk evaluation under section 6(b);

(ii) to implement a requirement imposed in a rule, order, or consent agreement under subsection (e) or (f) of section 5 or in a rule promulgated under section 6(a);

(iii) at the request of a Federal implementing authority under another Federal law, to meet the regulatory testing needs of that authority with regard to toxicity and exposure; or

(iv) pursuant to section 12(a)(2); and

(B) require the development of new information for the purposes of prioritizing a chemical substance under section 6(b) only if the Administrator determines that such information is necessary to establish the priority of the substance, subject to the limitations that—

(i) not later than 90 days after the date of receipt of information regarding a chemical substance complying with a rule, order, or consent agreement under this subparagraph, the Administrator shall designate the chemical substance as a high-priority substance or a low-priority substance; and

(ii) information required by the Administrator under this subparagraph shall not be required for the purposes of establishing or implementing a minimum information requirement of broader applicability.

(3) **STATEMENT OF NEED.**—When requiring the development of new information relating to a chemical substance or mixture under paragraph (2), the Administrator shall identify the need for the new information, describe how information reasonably available to the Administrator was used to inform the decision to require new information, explain the basis for any decision that requires the use of vertebrate animals, and, as applicable, explain why issuance of an order is warranted instead of promulgating a rule or entering into a consent agreement.

(4) **TIERED TESTING.**—When requiring the development of new information under this subsection, the Administrator shall

employ a tiered screening and testing process, under which the results of screening-level tests or assessments of available information inform the decision as to whether 1 or more additional tests are necessary, unless information available to the Administrator justifies more advanced testing of potential health or environmental effects or potential exposure without first conducting screening-level testing.

(5) *PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES RULE.*—

(A) *RULE.*—*Notwithstanding paragraphs (1) through (3), the Administrator shall, by rule, require that comprehensive toxicity testing be conducted on all chemical substances that are perfluoroalkyl or polyfluoroalkyl substances.*

(B) *REQUIREMENTS.*—*In issuing a rule under subparagraph (A), the Administrator—*

(i) may establish categories of perfluoroalkyl and polyfluoroalkyl substances based on hazard characteristics or chemical properties;

(ii) shall require the development of information relating to perfluoroalkyl and polyfluoroalkyl substances that the Administrator determines is likely to be useful in evaluating the hazard and risk posed by such substances in land, air, and water (including drinking water), as well as in products; and

(iii) may allow for varied or tiered testing requirements based on hazard characteristics or chemical properties of perfluoroalkyl and polyfluoroalkyl substances or categories of perfluoroalkyl and polyfluoroalkyl substances.

(C) *DEADLINES.*—*The Administrator shall issue—*

(i) a proposed rule under subparagraph (A) not later than 6 months after the date of enactment of this paragraph; and

(ii) a final rule under subparagraph (A) not later than 2 years after the date of enactment of this paragraph.

(b)(1) *TESTING REQUIREMENT RULE, ORDER, OR CONSENT AGREEMENT.*—*A rule, order, or consent agreement under subsection (a) shall include—*

(A) identification of the chemical substance or mixture for which testing is required under the rule, order, or consent agreement,

(B) protocols and methodologies for the development of information for such substance or mixture, and

(C) with respect to chemical substances which are not new chemical substances and to mixtures, a specification of the period (which period may not be of unreasonable duration) within which the persons required to conduct the testing shall submit to the Administrator information developed in accordance with the protocols and methodologies referred to in subparagraph (B).

In determining the protocols and methodologies and period to be included, pursuant to subparagraphs (B) and (C), in a rule, order, or consent agreement under subsection (a), the Administrator's considerations shall include the relative costs of the various test proto-

cols and methodologies which may be required under the rule, order, or consent agreement and the reasonably foreseeable availability of the facilities and personnel needed to perform the testing required under the rule, order, or consent agreement. Any such rule, order, or consent agreement may require the submission to the Administrator of preliminary information during the period prescribed under subparagraph (C).

(2)(A) The health and environmental effects for which protocols and methodologies for the development of information may be prescribed include carcinogenesis, mutagenesis, teratogenesis, behavioral disorders, cumulative or synergistic effects, and any other effect which may present an unreasonable risk of injury to health or the environment. Protocols and methodologies for the development of information may also be prescribed for the assessment of exposure or exposure potential to humans or the environment. The characteristics of chemical substances and mixtures for which such protocols and methodologies may be prescribed include persistence, acute toxicity, subacute toxicity, chronic toxicity, and any other characteristic which may present such a risk. The methodologies that may be prescribed in such protocols and methodologies include epidemiologic studies, serial or tiered testing, in vitro tests, and whole animal tests, except that before prescribing epidemiologic studies of employees, the Administrator shall consult with the Director of the National Institute for Occupational Safety and Health.

(B) From time to time, but not less than once each 12 months, the Administrator shall review the adequacy of the protocols and methodologies for development of information prescribed in rules, orders, and consent agreements under subsection (a) and shall, if necessary, institute proceedings to make appropriate revisions of such protocols and methodologies.

(3)(A) A rule or order under subsection (a) respecting a chemical substance or mixture shall require the persons described in [subparagraph (B) or (C)] *subparagraph (B), (C), or (D)*, as applicable, to conduct tests and submit information to the Administrator on such substance or mixture, except that the Administrator may permit two or more of such persons to designate one such person or a qualified third party to conduct such tests and submit such information on behalf of the persons making the designation.

(B) The following persons shall be required to conduct tests and submit information on a chemical substance or mixture subject to a rule under subsection (a)(1):

(i) Each person who manufactures or intends to manufacture such substance or mixture if the Administrator makes a finding described in subsection (a)(1)(A)(i)(II) or (a)(1)(A)(ii)(II) with respect to the manufacture of such substance or mixture.

(ii) Each person who processes or intends to process such substance or mixture if the Administrator makes a finding described in subsection (a)(1)(A)(i)(II) or (a)(1)(A)(ii)(II) with respect to the processing of such substance or mixture.

(iii) Each person who manufactures or processes or intends to manufacture or process such substance or mixture if the Administrator makes a finding described in subsection (a)(1)(A)(i)(II) or (a)(1)(A)(ii)(II) with respect to the distribution in commerce, use, or disposal of such substance or mixture.

(C) A rule or order under paragraph (1) or (2) of subsection (a) may require the development of information by any person who manufactures or processes, or intends to manufacture or process, a chemical substance or mixture subject to the rule or order.

(D) A rule under subsection (a)(5) shall require the development of information by any person who manufactures or processes, or intends to manufacture or process, a chemical substance that is a perfluoroalkyl or polyfluoroalkyl substance.

(4) Any rule, order, or consent agreement under subsection (a) requiring the testing of and submission of information for a particular chemical substance or mixture shall expire at the end of the reimbursement period (as defined in subsection (c)(3)(B)) which is applicable to information for such substance or mixture unless the Administrator repeals the rule or order or modifies the consent agreement to terminate the requirement before such date; and a rule, order, or consent agreement under subsection (a) requiring the testing of and submission of information for a category of chemical substances or mixtures shall expire with respect to a chemical substance or mixture included in the category at the end of the reimbursement period (as so defined) which is applicable to information for such substance or mixture unless the Administrator before such date repeals or modifies the application of the rule, order, or consent agreement to such substance or mixture or repeals the rule or order or modifies the consent agreement to terminate the requirement.

(c) EXEMPTION.—(1) Any person required by a rule or order under subsection (a) to conduct tests and submit information on a chemical substance or mixture may apply to the Administrator (in such form and manner as the Administrator shall prescribe) for an exemption from such requirement.

(2) If, upon receipt of an application under paragraph (1), the Administrator determines that—

(A) the chemical substance or mixture with respect to which such application was submitted is equivalent to a chemical substance or mixture for which information has been submitted to the Administrator in accordance with a rule, order, or consent agreement under subsection (a) or for which information is being developed pursuant to such a rule, order, or consent agreement, and

(B) submission of information by the applicant on such substance or mixture would be duplicative of information which has been submitted to the Administrator in accordance with such rule, order, or consent agreement or which is being developed pursuant to such rule, order, or consent agreement,

the Administrator shall exempt, in accordance with paragraph (3) or (4), the applicant from conducting tests and submitting information on such substance or mixture under the rule or order with respect to which such application was submitted.

(3)(A) If the exemption under paragraph (2) of any person from the requirement to conduct tests and submit information on a chemical substance or mixture is granted on the basis of the existence of previously submitted information and if such exemption is granted during the reimbursement period for such information (as prescribed by subparagraph (B)), then (unless such person and the persons referred to in clauses (i) and (ii) agree on the amount and

method of reimbursement) the Administrator shall order the person granted the exemption to provide fair and equitable reimbursement (in an amount determined under rules of the Administrator)—

(i) to the person who previously submitted such information, for a portion of the costs incurred by such person in complying with the requirement to submit such information, and

(ii) to any other person who has been required under this subparagraph to contribute with respect to such costs, for a portion of the amount such person was required to contribute.

In promulgating rules for the determination of fair and equitable reimbursement to the persons described in clauses (i) and (ii) for costs incurred with respect to a chemical substance or mixture, the Administrator shall, after consultation with the Attorney General and the Federal Trade Commission, consider all relevant factors, including the effect on the competitive position of the person required to provide reimbursement in relation to the person to be reimbursed and the share of the market for such substance or mixture of the person required to provide reimbursement in relation to the share of such market of the persons to be reimbursed. An order under this subparagraph shall, for purposes of judicial review, be considered final agency action.

(B) For purposes of subparagraph (A), the reimbursement period for any information for a chemical substance or mixture is a period—

(i) beginning on the date such information is submitted in accordance with a rule, order, or consent agreement under subsection (a), and

(ii) ending—

(I) five years after the date referred to in clause (i), or

(II) at the expiration of a period which begins on the date referred to in clause (i) and which is equal to the period which the Administrator determines was necessary to develop such information,

whichever is later.

(4)(A) If the exemption under paragraph (2) of any person from the requirement to conduct tests and submit information on a chemical substance or mixture is granted on the basis of the fact that information is being developed by one or more persons pursuant to a rule, order, or consent agreement under subsection (a), then (unless such person and the persons referred to in clauses (i) and (ii) agree on the amount and method of reimbursement) the Administrator shall order the person granted the exemption to provide fair and equitable reimbursement (in an amount determined under rules of the Administrator)—

(i) to each such person who is developing such information, for a portion of the costs incurred by each such person in complying with such rule, order, or consent agreement, and

(ii) to any other person who has been required under this subparagraph to contribute with respect to the costs of complying with such rule, order, or consent agreement, for a portion of the amount such person was required to contribute.

In promulgating rules for the determination of fair and equitable reimbursement to the persons described in clauses (i) and (ii) for costs incurred with respect to a chemical substance or mixture, the

Administrator shall, after consultation with the Attorney General and the Federal Trade Commission, consider the factors described in the second sentence of paragraph (3)(A). An order under this subparagraph shall, for purposes of judicial review, be considered final agency action.

(B) If any exemption is granted under paragraph (2) on the basis of the fact that one or more persons are developing information pursuant to a rule, order, or consent agreement under subsection (a) and if after such exemption is granted the Administrator determines that no such person has complied with such rule, order, or consent agreement, the Administrator shall (i) after providing written notice to the person who holds such exemption and an opportunity for a hearing, by order terminate such exemption, and (ii) notify in writing such person of the requirements of the rule or order with respect to which such exemption was granted.

(d) NOTICE.—Upon the receipt of any information pursuant to a rule, order, or consent agreement under subsection (a), the Administrator shall publish a notice of the receipt of such information in the Federal Register within 15 days of its receipt. Subject to section 14, each such notice shall (1) identify the chemical substance or mixture for which information has been received; (2) list the uses or intended uses of such substance or mixture and the information required by the applicable protocols and methodologies for the development of information; and (3) describe the nature of the information developed. Except as otherwise provided in section 14, such information shall be made available by the Administrator for examination by any person.

(e) PRIORITY LIST.—(1)(A) There is established a committee to make recommendations to the Administrator respecting the chemical substances and mixtures to which the Administrator should give priority consideration for the development of information under subsection (a). In making such a recommendation with respect to any chemical substance or mixture, the committee shall consider all relevant factors, including—

(i) the quantities in which the substance or mixture is or will be manufactured,

(ii) the quantities in which the substance or mixture enters or will enter the environment,

(iii) the number of individuals who are or will be exposed to the substance or mixture in their places of employment and the duration of such exposure,

(iv) the extent to which human beings are or will be exposed to the substance or mixture,

(v) the extent to which the substance or mixture is closely related to a chemical substance or mixture which is known to present an unreasonable risk of injury to health or the environment,

(vi) the existence of information concerning the effects of the substance or mixture on health or the environment,

(vii) the extent to which testing of the substance or mixture may result in the development of information upon which the effects of the substance or mixture on health or the environment can reasonably be determined or predicted, and

(viii) the reasonably foreseeable availability of facilities and personnel for performing testing on the substance or mixture.

The recommendations of the committee shall be in the form of a list of chemical substances and mixtures which shall be set forth, either by individual substance or mixture or by groups of substances or mixtures, in the order in which the committee determines the Administrator should take action under subsection (a) with respect to the substances and mixtures. In establishing such list, the committee shall give priority attention to those chemical substances and mixtures which are known to cause or contribute to or which are suspected of causing or contributing to cancer, gene mutations, or birth defects. The committee shall designate chemical substances and mixtures on the list with respect to which the committee determines the Administrator should, within 12 months of the date on which such substances and mixtures are first designated, initiate a proceeding under subsection (a). The total number of chemical substances and mixtures on the list which are designated under the preceding sentence may not, at any time, exceed 50.

(B) As soon as practicable but not later than nine months after the effective date of this Act, the committee shall publish in the Federal Register and transmit to the Administrator the list and designations required by subparagraph (A) together with the reasons for the committee's inclusion of each chemical substance or mixture on the list. At least every six months after the date of the transmission to the Administrator of the list pursuant to the preceding sentence, the committee shall make such revisions in the list as it determines to be necessary and shall transmit them to the Administrator together with the committee's reasons for the revisions. Upon receipt of any such revision, the Administrator shall publish in the Federal Register the list with such revision, the reasons for such revision, and the designations made under subparagraph (A). The Administrator shall provide reasonable opportunity to any interested person to file with the Administrator written comments on the committee's list, any revision of such list by the committee, and designations made by the committee, and shall make such comments available to the public. Within the 12-month period beginning on the date of the first inclusion on the list of a chemical substance or mixture designated by the committee under subparagraph (A) the Administrator shall with respect to such chemical substance or mixture issue an order, enter into a consent agreement, or initiate a rulemaking proceeding under subsection (a), or, if such an order or consent agreement is not issued or such a proceeding is not initiated within such period, publish in the Federal Register the Administrator's reason for not issuing such an order, entering into such a consent agreement, or initiating such a proceeding.

(2)(A) The committee established by paragraph (1)(A) shall consist of ten members as follows:

(i) One member appointed by the Administrator from the Environmental Protection Agency.

(ii) One member appointed by the Secretary of Labor from officers or employees of the Department of Labor engaged in the Secretary's activities under the Occupational Safety and Health Act of 1970.

(iii) One member appointed by the Chairman of the Council on Environmental Quality from the Council or its officers or employees.

(iv) One member appointed by the Director of the National Institute for Occupational Safety and Health from officers or employees of the Institute.

(v) One member appointed by the Director of the National Institute of Environmental Health Sciences from officers or employees of the Institute.

(vi) One member appointed by the Director of the National Cancer Institute from officers or employees of the Institute.

(vii) One member appointed by the Director of the National Science Foundation from officers or employees of the Foundation.

(viii) One member appointed by the Secretary of Commerce from officers or employees of the Department of Commerce.

(ix) One member appointed by the Chairman of the Consumer Product Safety Commission from Commissioners or employees of the Commission.

(x) One member appointed by the Commissioner of Food and Drugs from employees of the Food and Drug Administration.

(B)(i) An appointed member may designate an individual to serve on the committee on the member's behalf. Such a designation may be made only with the approval of the applicable appointing authority and only if the individual is from the entity from which the member was appointed.

(ii) No individual may serve as a member of the committee for more than four years in the aggregate. If any member of the committee leaves the entity from which the member was appointed, such member may not continue as a member of the committee, and the member's position shall be considered to be vacant. A vacancy in the committee shall be filled in the same manner in which the original appointment was made.

(iii) Initial appointments to the committee shall be made not later than the 60th day after the effective date of this Act. Not later than the 90th day after such date the members of the committee shall hold a meeting for the selection of a chairperson from among their number.

(C)(i) No member of the committee, or designee of such member, shall accept employment or compensation from any person subject to any requirement of this Act or of any rule promulgated or order issued thereunder, for a period of at least 12 months after termination of service on the committee.

(ii) No person, while serving as a member of the committee, or designee of such member, may own any stocks or bonds, or have any pecuniary interest, of substantial value in any person engaged in the manufacture, processing, or distribution in commerce of any chemical substance or mixture subject to any requirement of this Act or of any rule promulgated or order issued thereunder.

(iii) The Administrator, acting through attorneys of the Environmental Protection Agency, or the Attorney General may bring an action in the appropriate district court of the United States to restrain any violation of this subparagraph.

(D) The Administrator shall provide the committee such administrative support services as may be necessary to enable the committee to carry out its function under this subsection.

(f) REQUIRED ACTIONS.—Upon the receipt of—

(1) any information required to be submitted under this Act,

or

(2) any other information available to the Administrator, which indicates to the Administrator that there may be a reasonable basis to conclude that a chemical substance or mixture presents a significant risk of serious or widespread harm to human beings, the Administrator shall, within the 180-day period beginning on the date of the receipt of such information, initiate applicable action under section 5, 6, or 7 to prevent or reduce to a sufficient extent such risk or publish in the Federal Register a finding, made without consideration of costs or other nonrisk factors, that such risk is not unreasonable. For good cause shown the Administrator may extend such period for an additional period of not more than 90 days. The Administrator shall publish in the Federal Register notice of any such extension and the reasons therefor. A finding by the Administrator that a risk is not unreasonable shall be considered agency action for purposes of judicial review under chapter 7 of title 5, United States Code. This subsection shall not take effect until two years after the effective date of this Act.

(g) PETITION FOR PROTOCOLS AND METHODOLOGIES FOR THE DEVELOPMENT OF INFORMATION.—A person intending to manufacture or process a chemical substance for which notice is required under section 5(a) and who is not required under a rule, order, or consent agreement under subsection (a) to conduct tests and submit information on such substance may petition the Administrator to prescribe protocols and methodologies for the development of information for such substance. The Administrator shall by order either grant or deny any such petition within 60 days of its receipt. If the petition is granted, the Administrator shall prescribe such protocols and methodologies for such substance within 75 days of the date the petition is granted. If the petition is denied, the Administrator shall publish, subject to section 14, in the Federal Register the reasons for such denial.

(h) REDUCTION OF TESTING ON VERTEBRATES.—

(1) IN GENERAL.—The Administrator shall reduce and replace, to the extent practicable, scientifically justified, and consistent with the policies of this title, the use of vertebrate animals in the testing of chemical substances or mixtures under this title by—

(A) prior to making a request or adopting a requirement for testing using vertebrate animals, and in accordance with subsection (a)(3), taking into consideration, as appropriate and to the extent practicable and scientifically justified, reasonably available existing information, including—

(i) toxicity information;

(ii) computational toxicology and bioinformatics; and

(iii) high-throughput screening methods and the prediction models of those methods; and

(B) encouraging and facilitating—

(i) the use of scientifically valid test methods and strategies that reduce or replace the use of vertebrate

animals while providing information of equivalent or better scientific quality and relevance that will support regulatory decisions under this title;

(ii) the grouping of 2 or more chemical substances into scientifically appropriate categories in cases in which testing of a chemical substance would provide scientifically valid and useful information on other chemical substances in the category; and

(iii) the formation of industry consortia to jointly conduct testing to avoid unnecessary duplication of tests, provided that such consortia make all information from such testing available to the Administrator.

(2) IMPLEMENTATION OF ALTERNATIVE TESTING METHODS.—To promote the development and timely incorporation of new scientifically valid test methods and strategies that are not based on vertebrate animals, the Administrator shall—

(A) not later than 2 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, develop a strategic plan to promote the development and implementation of alternative test methods and strategies to reduce, refine, or replace vertebrate animal testing and provide information of equivalent or better scientific quality and relevance for assessing risks of injury to health or the environment of chemical substances or mixtures through, for example—

(i) computational toxicology and bioinformatics;

(ii) high-throughput screening methods;

(iii) testing of categories of chemical substances;

(iv) tiered testing methods;

(v) in vitro studies;

(vi) systems biology;

(vii) new or revised methods identified by validation bodies such as the Interagency Coordinating Committee on the Validation of Alternative Methods or the Organization for Economic Co-operation and Development; or

(viii) industry consortia that develop information submitted under this title;

(B) as practicable, ensure that the strategic plan developed under subparagraph (A) is reflected in the development of requirements for testing under this section;

(C) include in the strategic plan developed under subparagraph (A) a list, which the Administrator shall update on a regular basis, of particular alternative test methods or strategies the Administrator has identified that do not require new vertebrate animal testing and are scientifically reliable, relevant, and capable of providing information of equivalent or better scientific reliability and quality to that which would be obtained from vertebrate animal testing;

(D) provide an opportunity for public notice and comment on the contents of the plan developed under subparagraph (A), including the criteria for considering scientific reliability and relevance of the test methods and strategies that may be identified pursuant to subparagraph (C);

(E) beginning on the date that is 5 years after the date of enactment of the Frank R. Lautenberg Chemical Safety for the 21st Century Act, and every 5 years thereafter, submit to Congress a report that describes the progress made in implementing the plan developed under subparagraph (A) and goals for future alternative test methods and strategies implementation; and

(F) prioritize and, to the extent consistent with available resources and the Administrator's other responsibilities under this title, carry out performance assessment, validation, and translational studies to accelerate the development of scientifically valid test methods and strategies that reduce, refine, or replace the use of vertebrate animals, including minimizing duplication, in any testing under this title.

(3) VOLUNTARY TESTING.—

(A) IN GENERAL.—Any person developing information for submission under this title on a voluntary basis and not pursuant to any request or requirement by the Administrator shall first attempt to develop the information by means of an alternative test method or strategy identified by the Administrator pursuant to paragraph (2)(C), if the Administrator has identified such a test method or strategy for the development of such information, before conducting new vertebrate animal testing.

(B) EFFECT OF PARAGRAPH.—Nothing in this paragraph shall, under any circumstance, limit or restrict the submission of any existing information to the Administrator.

(C) RELATIONSHIP TO OTHER LAW.—A violation of this paragraph shall not be a prohibited act under section 15.

(D) REVIEW OF MEANS.—This paragraph authorizes, but does not require, the Administrator to review the means by which a person conducted testing described in subparagraph (A).

(i) PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES.—

(1) TESTING REQUIREMENT RULE.—

(A) PROTOCOLS AND METHODOLOGIES.—*In determining the protocols and methodologies to be included pursuant to subsection (b)(1) in a rule under subsection (a)(5), the Administrator shall allow for protocols and methodologies that test chemical substances that are perfluoroalkyl and polyfluoroalkyl substances as a class.*

(B) PERIOD.—*In determining the period to be included pursuant to subsection (b)(1) in a rule under subsection (a)(5), the Administrator shall ensure that the period is as short as possible while allowing for completion of the required testing.*

(2) EXEMPTIONS.—*In carrying out subsection (c) with respect to a chemical substance that is a perfluoroalkyl or polyfluoroalkyl substance, the Administrator—*

(A) may only determine under subsection (c)(2) that information would be duplicative if the chemical substance with respect to which the application for exemption is submitted is in the same category, as established under subsection (a)(5)(B)(i), as a chemical substance for which information

has been submitted to the Administrator in accordance with a rule, order, or consent agreement under subsection (a) or for which information is being developed pursuant to such a rule, order, or consent agreement; and

(B) shall publish a list of all such chemical substances for which an exemption under subsection (c) is granted.

SEC. 5. MANUFACTURING AND PROCESSING NOTICES.

(a) IN GENERAL.—(1)(A) Except as provided in subparagraph (B) of this paragraph and subsection (h), no person may—

(i) manufacture a new chemical substance on or after the 30th day after the date on which the Administrator first publishes the list required by section 8(b), or

(ii) manufacture or process any chemical substance for a use which the Administrator has determined, in accordance with paragraph (2), is a significant new use.

(B) A person may take the actions described in subparagraph (A) if—

(i) such person submits to the Administrator, at least 90 days before such manufacture or processing, a notice, in accordance with subsection (d), of such person's intention to manufacture or process such substance and such person complies with any applicable requirement of, or imposed pursuant to, subsection (b), (e), or (f); and

(ii) the Administrator—

(I) conducts a review of the notice; and

(II) makes a determination under subparagraph (A), (B), or (C) of paragraph (3) and takes the actions required in association with that determination under such subparagraph within the applicable review period.

(2) A determination by the Administrator that a use of a chemical substance is a significant new use with respect to which notification is required under paragraph (1) shall be made by a rule promulgated after a consideration of all relevant factors, including—

(A) the projected volume of manufacturing and processing of a chemical substance,

(B) the extent to which a use changes the type or form of exposure of human beings or the environment to a chemical substance,

(C) the extent to which a use increases the magnitude and duration of exposure of human beings or the environment to a chemical substance, and

(D) the reasonably anticipated manner and methods of manufacturing, processing, distribution in commerce, and disposal of a chemical substance.

(3) REVIEW AND DETERMINATION.—Within the applicable review period, subject to section 18, the Administrator shall review such notice and determine—

(A) that the relevant chemical substance or significant new use presents an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use,

in which case the Administrator shall take the actions required under subsection (f);

(B) that—

(i) the information available to the Administrator is insufficient to permit a reasoned evaluation of the health and environmental effects of the relevant chemical substance or significant new use; or

(ii)(I) in the absence of sufficient information to permit the Administrator to make such an evaluation, the manufacture, processing, distribution in commerce, use, or disposal of such substance, or any combination of such activities, may present an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator; or

(II) such substance is or will be produced in substantial quantities, and such substance either enters or may reasonably be anticipated to enter the environment in substantial quantities or there is or may be significant or substantial human exposure to the substance,

in which case the Administrator shall take the actions required under subsection (e); or

(C) that the relevant chemical substance or significant new use is not likely to present an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use, in which case the submitter of the notice may commence manufacture of the chemical substance or manufacture or processing for a significant new use.

(4) FAILURE TO RENDER DETERMINATION.—

(A) FAILURE TO RENDER DETERMINATION.—If the Administrator fails to make a determination on a notice under paragraph (3) by the end of the applicable review period and the notice has not been withdrawn by the submitter, the Administrator shall refund to the submitter all applicable fees charged to the submitter for review of the notice pursuant to section 26(b), and the Administrator shall not be relieved of any requirement to make such determination.

(B) LIMITATIONS.—(i) A refund of applicable fees under subparagraph (A) shall not be made if the Administrator certifies that the submitter has not provided information required under subsection (b) or has otherwise unduly delayed the process such that the Administrator is unable to render a determination within the applicable review period.

(ii) A failure of the Administrator to render a decision shall not be deemed to constitute a withdrawal of the notice.

(iii) Nothing in this paragraph shall be construed as relieving the Administrator or the submitter of the notice from any requirement of this section.

(5) ARTICLE CONSIDERATION.—The Administrator may require notification under this section for the import or processing of a chemical substance as part of an article or category of articles under paragraph (1)(A)(ii) if the Administrator makes an affirmative finding in a rule under paragraph (2) that the reasonable potential for exposure to the chemical substance through the article or category of articles subject to the rule justifies notification.

(b) SUBMISSION OF INFORMATION.—(1)(A) If (i) a person is required by subsection (a)(1) to submit a notice to the Administrator before beginning the manufacture or processing of a chemical substance, and (ii) such person is required to submit information for such substance pursuant to a rule, order, or consent agreement under section 4 before the submission of such notice, such person shall submit to the Administrator such information in accordance with such rule, order, or consent agreement at the time notice is submitted in accordance with subsection (a)(1).

(B) If—

(i) a person is required by subsection (a)(1) to submit a notice to the Administrator, and

(ii) such person has been granted an exemption under section 4(c) from the requirements of a rule or order under section 4 before the submission of such notice,

such person may not, before the expiration of the 90-day period which begins on the date of the submission in accordance with such rule of the information the submission or development of which was the basis for the exemption, manufacture such substance if such person is subject to subsection (a)(1)(A)(i) or manufacture or process such substance for a significant new use if the person is subject to subsection (a)(1)(A)(ii).

(2)(A) If a person—

(i) is required by subsection (a)(1) to submit a notice to the Administrator before beginning the manufacture or processing of a chemical substance listed under paragraph (4), and

(ii) is not required by a rule, order, or consent agreement under section 4 before the submission of such notice to submit information for such substance,

such person may submit to the Administrator information prescribed by subparagraph (B) at the time notice is submitted in accordance with subsection (a)(1).

(B) Information submitted pursuant to subparagraph (A) shall be information which the person submitting the information believes shows that—

(i) in the case of a substance with respect to which notice is required under subsection (a)(1)(A)(i), the manufacture, processing, distribution in commerce, use, and disposal of the chemical substance or any combination of such activities will not present an unreasonable risk of injury to health or the environment, or

(ii) in the case of a chemical substance with respect to which notice is required under subsection (a)(1)(A)(ii), the intended

significant new use of the chemical substance will not present an unreasonable risk of injury to health or the environment.

(3) Information submitted under paragraph (1) or (2) of this subsection or under subsection (e) shall be made available, subject to section 14, for examination by interested persons.

(4)(A)(i) The Administrator may, by rule, compile and keep current a list of chemical substances with respect to which the Administrator finds that the manufacture, processing, distribution in commerce, use, or disposal, or any combination of such activities, presents or may present an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors.

(ii) In making a finding under clause (i) that the manufacture, processing, distribution in commerce, use, or disposal of a chemical substance or any combination of such activities presents or may present an unreasonable risk of injury to health or the environment, the Administrator shall consider all relevant factors, including—

(I) the effects of the chemical substance on health and the magnitude of human exposure to such substance; and

(II) the effects of the chemical substance on the environment and the magnitude of environmental exposure to such substance.

(B) The Administrator shall, in prescribing a rule under subparagraph (A) which lists any chemical substance, identify those uses, if any, which the Administrator determines, by rule under subsection (a)(2), would constitute a significant new use of such substance.

(C) Any rule under subparagraph (A), and any substantive amendment or repeal of such a rule, shall be promulgated pursuant to the procedures specified in section 553 of title 5, United States Code.

(c) EXTENSION OF REVIEW PERIOD.—The Administrator may for good cause extend for additional periods (not to exceed in the aggregate 90 days) the period, prescribed by subsection (a) or (b). Subject to section 14, such an extension and the reasons therefor shall be published in the Federal Register and shall constitute a final agency action subject to judicial review.

(d) CONTENT OF NOTICE; PUBLICATIONS IN THE FEDERAL REGISTER.—(1) The notice required by subsection (a) shall include—

(A) insofar as known to the person submitting the notice or insofar as reasonably ascertainable, the information described in subparagraphs (A), (B), (C), (D), (F), and (G) of section 8(a)(2), and

(B) in such form and manner as the Administrator may prescribe, any information in the possession or control of the person giving such notice which are related to the effect of any manufacture, processing, distribution in commerce, use, or disposal of such substance or any article containing such substance, or of any combination of such activities, on health or the environment, and

(C) a description of any other information concerning the environmental and health effects of such substance, insofar as known to the person making the notice or insofar as reasonably ascertainable.

Such a notice shall be made available, subject to section 14, for examination by interested persons.

(2) Subject to section 14, not later than five days (excluding Saturdays, Sundays and legal holidays) after the date of the receipt of a notice under subsection (a) or of information under subsection (b), the Administrator shall publish in the Federal Register a notice which—

(A) identifies the chemical substance for which notice or information has been received;

(B) lists the uses of such substance identified in the notice; and

(C) in the case of the receipt of information under subsection (b), describes the nature of the tests performed on such substance and any information which was developed pursuant to subsection (b) or a rule, order, or consent agreement under section 4.

A notice under this paragraph respecting a chemical substance shall identify the chemical substance by generic class unless the Administrator determines that more specific identification is required in the public interest.

(3) At the beginning of each month the Administrator shall publish a list in the Federal Register of (A) each chemical substance for which notice has been received under subsection (a) and for which the applicable review period has not expired, and (B) each chemical substance for which such period has expired since the last publication in the Federal Register of such list.

(e) REGULATION PENDING DEVELOPMENT OF INFORMATION.—(1)(A) If the Administrator determines that—

(i) the information available to the Administrator is insufficient to permit a reasoned evaluation of the health and environmental effects of a chemical substance with respect to which notice is required by subsection (a); or

(ii)(I) in the absence of sufficient information to permit the Administrator to make such an evaluation, the manufacture, processing, distribution in commerce, use, or disposal of such substance, or any combination of such activities, may present an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed subpopulation identified as relevant by the Administrator under the conditions of use; or

(II) such substance is or will be produced in substantial quantities, and such substance either enters or may reasonably be anticipated to enter the environment in substantial quantities or there is or may be significant or substantial human exposure to the substance,

the Administrator shall issue an order, to take effect on the expiration of the applicable review period, to prohibit or limit the manufacture, processing, distribution in commerce, use, or disposal of such substance or to prohibit or limit any combination of such activities to the extent necessary to protect against an unreasonable risk of injury to health or the environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified as relevant by the Administrator under the conditions of use, and the

submitter of the notice may commence manufacture of the chemical substance, or manufacture or processing of the chemical substance for a significant new use, including while any required information is being developed, only in compliance with the order.

(B) An order may not be issued under subparagraph (A) respecting a chemical substance (i) later than 45 days before the expiration of the applicable review period, and (ii) unless the Administrator has, on or before the issuance of the order, notified, in writing, each manufacturer or processor, as the case may be, of such substance of the determination which underlies such order.

(f) PROTECTION AGAINST UNREASONABLE RISKS.—(1) If the Administrator determines that a chemical substance or significant new use with respect to which notice is required by subsection (a) presents an unreasonable risk of injury to health or environment, without consideration of costs or other nonrisk factors, including an unreasonable risk to a potentially exposed subpopulation identified as relevant by the Administrator under the conditions of use, the Administrator shall, before the expiration of the applicable review period, take the action authorized by paragraph (2) or (3) to the extent necessary to protect against such risk.

(2) The Administrator may issue a proposed rule under section 6(a) to apply to a chemical substance with respect to which a finding was made under paragraph (1)—

(A) a requirement limiting the amount of such substance which may be manufactured, processed, or distributed in commerce,

(B) a requirement described in paragraph (2), (3), (4), (5), (6), or (7) of section 6(a), or

(C) any combination of the requirements referred to in subparagraph (B).

Such a proposed rule shall be effective upon its publication in the Federal Register. Section 6(d)(3)(B) shall apply with respect to such rule.

(3)(A) The Administrator may issue an order to prohibit or limit the manufacture, processing, or distribution in commerce of a substance with respect to which a finding was made under paragraph (1). Such order shall take effect on the expiration of the applicable review period.

(B) The provisions of subparagraph (B) of subsection (e)(1) shall apply with respect to an order issued under subparagraph (A).

(4) TREATMENT OF NONCONFORMING USES.—Not later than 90 days after taking an action under paragraph (2) or (3) or issuing an order under subsection (e) relating to a chemical substance with respect to which the Administrator has made a determination under subsection (a)(3)(A) or (B), the Administrator shall consider whether to promulgate a rule pursuant to subsection (a)(2) that identifies as a significant new use any manufacturing, processing, use, distribution in commerce, or disposal of the chemical substance that does not conform to the restrictions imposed by the action or order, and, as applicable, initiate such a rulemaking or publish a statement describing the reasons of the Administrator for not initiating such a rulemaking.

(5) WORKPLACE EXPOSURES.—To the extent practicable, the Administrator shall consult with the Assistant Secretary of

Labor for Occupational Safety and Health prior to adopting any prohibition or other restriction relating to a chemical substance with respect to which the Administrator has made a determination under subsection (a)(3)(A) or (B) to address workplace exposures.

(g) STATEMENT ON ADMINISTRATOR FINDING.—If the Administrator finds in accordance with subsection (a)(3)(C) that a chemical substance or significant new use is not likely to present an unreasonable risk of injury to health or the environment, then notwithstanding any remaining portion of the applicable review period, the submitter of the notice may commence manufacture of the chemical substance or manufacture or processing for the significant new use, and the Administrator shall make public a statement of the Administrator's finding. Such a statement shall be submitted for publication in the Federal Register as soon as is practicable before the expiration of such period. Publication of such statement in accordance with the preceding sentence is not a prerequisite to the manufacturing or processing of the substance with respect to which the statement is to be published.

(h) EXEMPTIONS.—(1) The Administrator may, upon application, exempt any person from any requirement of subsection (a) or (b) to permit such person to manufacture or process a chemical substance for test marketing purposes—

(A) upon a showing by such person satisfactory to the Administrator that the manufacture, processing, distribution in commerce, use, and disposal of such substance, and that any combination of such activities, for such purposes will not present any unreasonable risk of injury to health or the environment, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified by the Administrator for the specific conditions of use identified in the application, and

(B) under such restrictions as the Administrator considers appropriate.

(2)(A) The Administrator may, upon application, exempt any person from the requirement of subsection (b)(2) to submit information for a chemical substance. If, upon receipt of an application under the preceding sentence, the Administrator determines that—

(i) the chemical substance with respect to which such application was submitted is equivalent to a chemical substance for which information has been submitted to the Administrator as required by subsection (b)(2), and

(ii) submission of information by the applicant on such substance would be duplicative of information which has been submitted to the Administrator in accordance with such subsection,

the Administrator shall exempt the applicant from the requirement to submit such information on such substance. No exemption which is granted under this subparagraph with respect to the submission of information for a chemical substance may take effect before the beginning of the reimbursement period applicable to such information.

(B) If the Administrator exempts any person, under subparagraph (A), from submitting information required under subsection (b)(2) for a chemical substance because of the existence of pre-

viously submitted information and if such exemption is granted during the reimbursement period for such information, then (unless such person and the persons referred to in clauses (i) and (ii) agree on the amount and method of reimbursement) the Administrator shall order the person granted the exemption to provide fair and equitable reimbursement (in an amount determined under rules of the Administrator)—

(i) to the person who previously submitted the information on which the exemption was based, for a portion of the costs incurred by such person in complying with the requirement under subsection (b)(2) to submit such information, and

(ii) to any other person who has been required under this subparagraph to contribute with respect to such costs, for a portion of the amount such person was required to contribute.

In promulgating rules for the determination of fair and equitable reimbursement to the persons described in clauses (i) and (ii) for costs incurred with respect to a chemical substance, the Administrator shall, after consultation with the Attorney General and the Federal Trade Commission, consider all relevant factors, including the effect on the competitive position of the person required to provide reimbursement in relation to the persons to be reimbursed and the share of the market for such substance of the person required to provide reimbursement in relation to the share of such market of the persons to be reimbursed. For purposes of judicial review, an order under this subparagraph shall be considered final agency action.

(C) For purposes of this paragraph, the reimbursement period for any previously submitted information for a chemical substance is a period—

(i) beginning on the date of the termination of the prohibition, imposed under this section, on the manufacture or processing of such substance by the person who submitted such information to the Administrator, and

(ii) ending—

(I) five years after the date referred to in clause (i), or

(II) at the expiration of a period which begins on the date referred to in clause (i) and is equal to the period which the Administrator determines was necessary to develop such information,

whichever is later.

(3) The requirements of subsections (a) and (b) do not apply with respect to the manufacturing or processing of any chemical substance which is manufactured or processed, or proposed to be manufactured or processed, only in small quantities (as defined by the Administrator by rule) solely for purposes of—

(A) scientific experimentation or analysis, or

(B) chemical research on, or analysis of such substance or another substance, including such research or analysis for the development of a product,

if all persons engaged in such experimentation, research, or analysis for a manufacturer or processor are notified (in such form and manner as the Administrator may prescribe) of any risk to health which the manufacturer, processor, or the Administrator has reason to believe may be associated with such chemical substance.

(4) The Administrator may, upon application and by rule, exempt the manufacturer of any new chemical substance from all or part of the requirements of this section if the Administrator determines that the manufacture, processing, distribution in commerce, use, or disposal of such chemical substance, or that any combination of such activities, will not present an unreasonable risk of injury to health or the environment, including an unreasonable risk to a potentially exposed or susceptible subpopulation identified by the Administrator under the conditions of use.

(5) The Administrator may, upon application, make the requirements of subsections (a) and (b) inapplicable with respect to the manufacturing or processing of any chemical substance (A) which exists temporarily as a result of a chemical reaction in the manufacturing or processing of a mixture or another chemical substance, and (B) to which there is no, and will not be, human or environmental exposure.

(6) Immediately upon receipt of an application under paragraph (1) or (5) the Administrator shall publish in the Federal Register notice of the receipt of such application. The Administrator shall give interested persons an opportunity to comment upon any such application and shall, within 45 days of its receipt, either approve or deny the application. The Administrator shall publish in the Federal Register notice of the approval or denial of such an application.

(7) *This subsection does not apply to any chemical substance that is a perfluoroalkyl or polyfluoroalkyl substance.*

(i) DEFINITIONS.—(1) For purposes of this section, the terms “manufacture” and “process” mean manufacturing or processing for commercial purposes.

(2) For purposes of this Act, the term “requirement” as used in this section shall not displace any statutory or common law.

(3) For purposes of this section, the term “applicable review period” means the period starting on the date the Administrator receives a notice under subsection (a)(1) and ending 90 days after that date, or on such date as is provided for in subsection (b)(1) or (c).

(j) *PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES.—*

(1) *DETERMINATION.—For a period of 5 years beginning on the date of enactment of this subsection, any chemical substance that is a perfluoroalkyl or polyfluoroalkyl substance for which a notice is submitted under subsection (a) shall be deemed to have been determined by the Administrator to present an unreasonable risk of injury to health or the environment under paragraph (3)(A) of such subsection.*

(2) *ORDER.—Notwithstanding subsection (a)(3)(A), for a chemical substance described in paragraph (1) of this subsection, the Administrator shall issue an order under subsection (f)(3) to prohibit the manufacture, processing, and distribution in commerce of such chemical substance.*

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SAFE DRINKING WATER ACT

* * * * *

TITLE XIV—SAFETY OF PUBLIC WATER SYSTEMS

* * * * *

PART B—PUBLIC WATER SYSTEMS

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NATIONAL DRINKING WATER REGULATIONS

SEC. 1412. (a)(1) Effective on the enactment of the Safe Drinking Water Act Amendments of 1986, each national interim or revised primary drinking water regulation promulgated under this section before such enactment shall be deemed to be a national primary drinking water regulation under subsection (b). No such regulation shall be required to comply with the standards set forth in subsection (b)(4) unless such regulation is amended to establish a different maximum contaminant level after the enactment of such amendments.

(2) After the enactment of the Safe Drinking Water Act Amendments of 1986 each recommended maximum contaminant level published before the enactment of such amendments shall be treated as a maximum contaminant level goal.

(3) Whenever a national primary drinking water regulation is proposed under subsection (b) for any contaminant, the maximum contaminant level goal for such contaminant shall be proposed simultaneously. Whenever a national primary drinking water regulation is promulgated under subsection (b) for any contaminant, the maximum contaminant level goal for such contaminant shall be published simultaneously.

(4) Paragraph (3) shall not apply to any recommended maximum contaminant level published before the enactment of the Safe Drinking Water Act Amendments of 1986.

(b) STANDARDS.—

(1) IDENTIFICATION OF CONTAMINANTS FOR LISTING.—

(A) GENERAL AUTHORITY.—The Administrator shall, in accordance with the procedures established by this subsection, publish a maximum contaminant level goal and promulgate a national primary drinking water regulation for a contaminant (other than a contaminant referred to in paragraph (2) for which a national primary drinking water regulation has been promulgated as of the date of enactment of the Safe Drinking Water Act Amendments of 1996) if the Administrator determines that—

(i) the contaminant may have an adverse effect on the health of persons;

(ii) the contaminant is known to occur or there is a substantial likelihood that the contaminant will occur in public water systems with a frequency and at levels of public health concern; and

(iii) in the sole judgment of the Administrator, regulation of such contaminant presents a meaningful opportunity for health risk reduction for persons served by public water systems.

(B) REGULATION OF UNREGULATED CONTAMINANTS.—

(i) LISTING OF CONTAMINANTS FOR CONSIDERATION.—

(I) Not later than 18 months after the date of enact-

ment of the Safe Drinking Water Act Amendments of 1996 and every 5 years thereafter, the Administrator, after consultation with the scientific community, including the Science Advisory Board, after notice and opportunity for public comment, and after considering the occurrence data base established under section 1445(g), shall publish a list of contaminants which, at the time of publication, are not subject to any proposed or promulgated national primary drinking water regulation, which are known or anticipated to occur in public water systems, and which may require regulation under this title.

(II) The unregulated contaminants considered under subclause (I) shall include, but not be limited to, substances referred to in section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, and substances registered as pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act.

(III) The Administrator's decision whether or not to select an unregulated contaminant for a list under this clause shall not be subject to judicial review.

(ii) DETERMINATION TO REGULATE.—(I) Not later than 5 years after the date of enactment of the Safe Drinking Water Act Amendments of 1996, and every 5 years thereafter, the Administrator shall, after notice of the preliminary determination and opportunity for public comment, for not fewer than 5 contaminants included on the list published under clause (i), make determinations of whether or not to regulate such contaminants.

(II) A determination to regulate a contaminant shall be based on findings that the criteria of clauses (i), (ii), and (iii) of subparagraph (A) are satisfied. Such findings shall be based on the best available public health information, including the occurrence data base established under section 1445(g).

(III) The Administrator may make a determination to regulate a contaminant that does not appear on a list under clause (i) if the determination to regulate is made pursuant to subclause (II).

(IV) A determination under this clause not to regulate a contaminant shall be considered final agency action and subject to judicial review.

(iii) REVIEW.—Each document setting forth the determination for a contaminant under clause (ii) shall be available for public comment at such time as the determination is published.

(C) PRIORITIES.—In selecting unregulated contaminants for consideration under subparagraph (B), the Administrator shall select contaminants that present the greatest public health concern. The Administrator, in making such selection, shall take into consideration, among other factors of public health concern, the effect of such contaminants upon subgroups that comprise a meaningful portion

of the general population (such as infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations) that are identifiable as being at greater risk of adverse health effects due to exposure to contaminants in drinking water than the general population.

(D) URGENT THREATS TO PUBLIC HEALTH.—The Administrator may promulgate an interim national primary drinking water regulation for a contaminant without making a determination for the contaminant under paragraph (4)(C), or completing the analysis under paragraph (3)(C), to address an urgent threat to public health as determined by the Administrator after consultation with and written response to any comments provided by the Secretary of Health and Human Services, acting through the director of the Centers for Disease Control and Prevention or the director of the National Institutes of Health. A determination for any contaminant in accordance with paragraph (4)(C) subject to an interim regulation under this subparagraph shall be issued, and a completed analysis meeting the requirements of paragraph (3)(C) shall be published, not later than 3 years after the date on which the regulation is promulgated and the regulation shall be repromulgated, or revised if appropriate, not later than 5 years after that date.

(E) REGULATION.—For each contaminant that the Administrator determines to regulate under subparagraph (B), the Administrator shall publish maximum contaminant level goals and promulgate, by rule, national primary drinking water regulations under this subsection. The Administrator shall propose the maximum contaminant level goal and national primary drinking water regulation for a contaminant not later than 24 months after the determination to regulate under subparagraph (B), and may publish such proposed regulation concurrent with the determination to regulate. The Administrator shall publish a maximum contaminant level goal and promulgate a national primary drinking water regulation within 18 months after the proposal thereof. The Administrator, by notice in the Federal Register, may extend the deadline for such promulgation for up to 9 months.

(F) HEALTH ADVISORIES AND OTHER ACTIONS.—The Administrator may publish health advisories (which are not regulations) or take other appropriate actions for contaminants not subject to any national primary drinking water regulation.

(2) SCHEDULES AND DEADLINES.—

(A) IN GENERAL.—In the case of the contaminants listed in the Advance Notice of Proposed Rulemaking published in volume 47, Federal Register, page 9352, and in volume 48, Federal Register, page 45502, the Administrator shall publish maximum contaminant level goals and promulgate national primary drinking water regulations—

- (i) not later than 1 year after June 19, 1986, for not fewer than 9 of the listed contaminants;

- (ii) not later than 2 years after June 19, 1986, for not fewer than 40 of the listed contaminants; and
- (iii) not later than 3 years after June 19, 1986, for the remainder of the listed contaminants.

(B) **SUBSTITUTION OF CONTAMINANTS.**—If the Administrator identifies a drinking water contaminant the regulation of which, in the judgment of the Administrator, is more likely to be protective of public health (taking into account the schedule for regulation under subparagraph (A)) than a contaminant referred to in subparagraph (A), the Administrator may publish a maximum contaminant level goal and promulgate a national primary drinking water regulation for the identified contaminant in lieu of regulating the contaminant referred to in subparagraph (A). Substitutions may be made for not more than 7 contaminants referred to in subparagraph (A). Regulation of a contaminant identified under this subparagraph shall be in accordance with the schedule applicable to the contaminant for which the substitution is made.

(C) **DISINFECTANTS AND DISINFECTION BYPRODUCTS.**—The Administrator shall promulgate an Interim Enhanced Surface Water Treatment Rule, a Final Enhanced Surface Water Treatment Rule, a Stage I Disinfectants and Disinfection Byproducts Rule, and a Stage II Disinfectants and Disinfection Byproducts Rule in accordance with the schedule published in volume 59, Federal Register, page 6361 (February 10, 1994), in table III.13 of the proposed Information Collection Rule. If a delay occurs with respect to the promulgation of any rule in the schedule referred to in this subparagraph, all subsequent rules shall be completed as expeditiously as practicable but no later than a revised date that reflects the interval or intervals for the rules in the schedule.

(3) **RISK ASSESSMENT, MANAGEMENT, AND COMMUNICATION.**—

(A) **USE OF SCIENCE IN DECISIONMAKING.**—In carrying out this section, and, to the degree that an Agency action is based on science, the Administrator shall use—

- (i) the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices; and
- (ii) data collected by accepted methods or best available methods (if the reliability of the method and the nature of the decision justifies use of the data).

(B) **PUBLIC INFORMATION.**—In carrying out this section, the Administrator shall ensure that the presentation of information on public health effects is comprehensive, informative, and understandable. The Administrator shall, in a document made available to the public in support of a regulation promulgated under this section, specify, to the extent practicable—

- (i) each population addressed by any estimate of public health effects;
- (ii) the expected risk or central estimate of risk for the specific populations;

(iii) each appropriate upper-bound or lower-bound estimate of risk;

(iv) each significant uncertainty identified in the process of the assessment of public health effects and studies that would assist in resolving the uncertainty; and

(v) peer-reviewed studies known to the Administrator that support, are directly relevant to, or fail to support any estimate of public health effects and the methodology used to reconcile inconsistencies in the scientific data.

(C) HEALTH RISK REDUCTION AND COST ANALYSIS.—

(i) MAXIMUM CONTAMINANT LEVELS.—When proposing any national primary drinking water regulation that includes a maximum contaminant level, the Administrator shall, with respect to a maximum contaminant level that is being considered in accordance with paragraph (4) and each alternative maximum contaminant level that is being considered pursuant to paragraph (5) or (6)(A), publish, seek public comment on, and use for the purposes of paragraphs (4), (5), and (6) an analysis of each of the following:

(I) Quantifiable and nonquantifiable health risk reduction benefits for which there is a factual basis in the rulemaking record to conclude that such benefits are likely to occur as the result of treatment to comply with each level.

(II) Quantifiable and nonquantifiable health risk reduction benefits for which there is a factual basis in the rulemaking record to conclude that such benefits are likely to occur from reductions in co-occurring contaminants that may be attributed solely to compliance with the maximum contaminant level, excluding benefits resulting from compliance with other proposed or promulgated regulations.

(III) Quantifiable and nonquantifiable costs for which there is a factual basis in the rulemaking record to conclude that such costs are likely to occur solely as a result of compliance with the maximum contaminant level, including monitoring, treatment, and other costs and excluding costs resulting from compliance with other proposed or promulgated regulations.

(IV) The incremental costs and benefits associated with each alternative maximum contaminant level considered.

(V) The effects of the contaminant on the general population and on groups within the general population such as infants, children, pregnant women, the elderly, individuals with a history of serious illness, or other subpopulations that are identified as likely to be at greater risk of adverse health effects due to exposure to contaminants in drinking water than the general population.

(VI) Any increased health risk that may occur as the result of compliance, including risks associated with co-occurring contaminants.

(VII) Other relevant factors, including the quality and extent of the information, the uncertainties in the analysis supporting subclauses (I) through (VI), and factors with respect to the degree and nature of the risk.

(ii) TREATMENT TECHNIQUES.—When proposing a national primary drinking water regulation that includes a treatment technique in accordance with paragraph (7)(A), the Administrator shall publish and seek public comment on an analysis of the health risk reduction benefits and costs likely to be experienced as the result of compliance with the treatment technique and alternative treatment techniques that are being considered, taking into account, as appropriate, the factors described in clause (i).

(iii) APPROACHES TO MEASURE AND VALUE BENEFITS.—The Administrator may identify valid approaches for the measurement and valuation of benefits under this subparagraph, including approaches to identify consumer willingness to pay for reductions in health risks from drinking water contaminants.

(iv) AUTHORIZATION.—There are authorized to be appropriated to the Administrator, acting through the Office of Ground Water and Drinking Water, to conduct studies, assessments, and analyses in support of regulations or the development of methods, \$35,000,000 for each of fiscal years 1996 through 2003.

(4) GOALS AND STANDARDS.—

(A) MAXIMUM CONTAMINANT LEVEL GOALS.—Each maximum contaminant level goal established under this subsection shall be set at the level at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety.

(B) MAXIMUM CONTAMINANT LEVELS.—Except as provided in paragraphs (5) and (6), each national primary drinking water regulation for a contaminant for which a maximum contaminant level goal is established under this subsection shall specify a maximum contaminant level for such contaminant which is as close to the maximum contaminant level goal as is feasible.

(C) DETERMINATION.—At the time the Administrator proposes a national primary drinking water regulation under this paragraph, the Administrator shall publish a determination as to whether the benefits of the maximum contaminant level justify, or do not justify, the costs based on the analysis conducted under paragraph (3)(C).

(D) DEFINITION OF FEASIBLE.—For the purposes of this subsection, the term “feasible” means feasible with the use of the best technology, treatment techniques and other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consider-

ation). For the purpose of this paragraph, granular activated carbon is feasible for the control of synthetic organic chemicals, and any technology, treatment technique, or other means found to be the best available for the control of synthetic organic chemicals must be at least as effective in controlling synthetic organic chemicals as granular activated carbon.

(E) FEASIBLE TECHNOLOGIES.—

(i) IN GENERAL.—Each national primary drinking water regulation which establishes a maximum contaminant level shall list the technology, treatment techniques, and other means which the Administrator finds to be feasible for purposes of meeting such maximum contaminant level, but a regulation under this subsection shall not require that any specified technology, treatment technique, or other means be used for purposes of meeting such maximum contaminant level.

(ii) LIST OF TECHNOLOGIES FOR SMALL SYSTEMS.—The Administrator shall include in the list any technology, treatment technique, or other means that is affordable, as determined by the Administrator in consultation with the States, for small public water systems serving—

(I) a population of 10,000 or fewer but more than 3,300;

(II) a population of 3,300 or fewer but more than 500; and

(III) a population of 500 or fewer but more than 25;

and that achieves compliance with the maximum contaminant level or treatment technique, including packaged or modular systems and point-of-entry or point-of-use treatment units. Point-of-entry and point-of-use treatment units shall be owned, controlled and maintained by the public water system or by a person under contract with the public water system to ensure proper operation and maintenance and compliance with the maximum contaminant level or treatment technique and equipped with mechanical warnings to ensure that customers are automatically notified of operational problems. The Administrator shall not include in the list any point-of-use treatment technology, treatment technique, or other means to achieve compliance with a maximum contaminant level or treatment technique requirement for a microbial contaminant (or an indicator of a microbial contaminant). If the American National Standards Institute has issued product standards applicable to a specific type of point-of-entry or point-of-use treatment unit, individual units of that type shall not be accepted for compliance with a maximum contaminant level or treatment technique requirement unless they are independently certified in accordance with such standards. In listing any technology, treatment technique, or other

means pursuant to this clause, the Administrator shall consider the quality of the source water to be treated.

(iii) LIST OF TECHNOLOGIES THAT ACHIEVE COMPLIANCE.—Except as provided in clause (v), not later than 2 years after the date of enactment of this clause and after consultation with the States, the Administrator shall issue a list of technologies that achieve compliance with the maximum contaminant level or treatment technique for each category of public water systems described in subclauses (I), (II), and (III) of clause (ii) for each national primary drinking water regulation promulgated prior to the date of enactment of this paragraph.

(iv) ADDITIONAL TECHNOLOGIES.—The Administrator may, at any time after a national primary drinking water regulation has been promulgated, supplement the list of technologies describing additional or new or innovative treatment technologies that meet the requirements of this paragraph for categories of small public water systems described in subclauses (I), (II), and (III) of clause (ii) that are subject to the regulation.

(v) TECHNOLOGIES THAT MEET SURFACE WATER TREATMENT RULE.—Within one year after the date of enactment of this clause, the Administrator shall list technologies that meet the Surface Water Treatment Rule for each category of public water systems described in subclauses (I), (II), and (III) of clause (ii).

(5) ADDITIONAL HEALTH RISK CONSIDERATIONS.—

(A) IN GENERAL.—Notwithstanding paragraph (4), the Administrator may establish a maximum contaminant level for a contaminant at a level other than the feasible level, if the technology, treatment techniques, and other means used to determine the feasible level would result in an increase in the health risk from drinking water by—

(i) increasing the concentration of other contaminants in drinking water; or

(ii) interfering with the efficacy of drinking water treatment techniques or processes that are used to comply with other national primary drinking water regulations.

(B) ESTABLISHMENT OF LEVEL.—If the Administrator establishes a maximum contaminant level or levels or requires the use of treatment techniques for any contaminant or contaminants pursuant to the authority of this paragraph—

(i) the level or levels or treatment techniques shall minimize the overall risk of adverse health effects by balancing the risk from the contaminant and the risk from other contaminants the concentrations of which may be affected by the use of a treatment technique or process that would be employed to attain the maximum contaminant level or levels; and

(ii) the combination of technology, treatment techniques, or other means required to meet the level or

levels shall not be more stringent than is feasible (as defined in paragraph (4)(D)).

(6) ADDITIONAL HEALTH RISK REDUCTION AND COST CONSIDERATIONS.—

(A) IN GENERAL.—Notwithstanding paragraph (4), if the Administrator determines based on an analysis conducted under paragraph (3)(C) that the benefits of a maximum contaminant level promulgated in accordance with paragraph (4) would not justify the costs of complying with the level, the Administrator may, after notice and opportunity for public comment, promulgate a maximum contaminant level for the contaminant that maximizes health risk reduction benefits at a cost that is justified by the benefits.

(B) EXCEPTION.—The Administrator shall not use the authority of this paragraph to promulgate a maximum contaminant level for a contaminant, if the benefits of compliance with a national primary drinking water regulation for the contaminant that would be promulgated in accordance with paragraph (4) experienced by—

(i) persons served by large public water systems; and

(ii) persons served by such other systems as are unlikely, based on information provided by the States, to receive a variance under section 1415(e) (relating to small system variances);

would justify the costs to the systems of complying with the regulation. This subparagraph shall not apply if the contaminant is found almost exclusively in small systems eligible under section 1415(e) for a small system variance.

(C) DISINFECTANTS AND DISINFECTION BYPRODUCTS.—The Administrator may not use the authority of this paragraph to establish a maximum contaminant level in a Stage I or Stage II national primary drinking water regulation (as described in paragraph (2)(C)) for contaminants that are disinfectants or disinfection byproducts, or to establish a maximum contaminant level or treatment technique requirement for the control of cryptosporidium. The authority of this paragraph may be used to establish regulations for the use of disinfection by systems relying on ground water sources as required by paragraph (8).

(D) JUDICIAL REVIEW.—A determination by the Administrator that the benefits of a maximum contaminant level or treatment requirement justify or do not justify the costs of complying with the level shall be reviewed by the court pursuant to section 1448 only as part of a review of a final national primary drinking water regulation that has been promulgated based on the determination and shall not be set aside by the court under that section unless the court finds that the determination is arbitrary and capricious.

(7)(A) The Administrator is authorized to promulgate a national primary drinking water regulation that requires the use of a treatment technique in lieu of establishing a maximum contaminant level, if the Administrator makes a finding that it is not economically or technologically feasible to ascertain the level of the contaminant. In such case, the Administrator shall identify those

treatment techniques which, in the Administrator's judgment, would prevent known or anticipated adverse effects on the health of persons to the extent feasible. Such regulations shall specify each treatment technique known to the Administrator which meets the requirements of this paragraph, but the Administrator may grant a variance from any specified treatment technique in accordance with section 1415(a)(3).

(B) Any schedule referred to in this subsection for the promulgation of a national primary drinking water regulation for any contaminant shall apply in the same manner if the regulation requires a treatment technique in lieu of establishing a maximum contaminant level.

(C)(i) Not later than 18 months after the enactment of the Safe Drinking Water Act Amendments of 1986, the Administrator shall propose and promulgate national primary drinking water regulations specifying criteria under which filtration (including coagulation and sedimentation, as appropriate) is required as a treatment technique for public water systems supplied by surface water sources. In promulgating such rules, the Administrator shall consider the quality of source waters, protection afforded by watershed management, treatment practices (such as disinfection and length of water storage) and other factors relevant to protection of health.

(ii) In lieu of the provisions of section 1415 the Administrator shall specify procedures by which the State determines which public water systems within its jurisdiction shall adopt filtration under the criteria of clause (i). The State may require the public water system to provide studies or other information to assist in this determination. The procedures shall provide notice and opportunity for public hearing on this determination. If the State determines that filtration is required, the State shall prescribe a schedule for compliance by the public water system with the filtration requirement. A schedule shall require compliance within 18 months of a determination made under clause (iii).

(iii) Within 18 months from the time that the Administrator establishes the criteria and procedures under this subparagraph, a State with primary enforcement responsibility shall adopt any necessary regulations to implement this subparagraph. Within 12 months of adoption of such regulations the State shall make determinations regarding filtration for all the public water systems within its jurisdiction supplied by surface waters.

(iv) If a State does not have primary enforcement responsibility for public water systems, the Administrator shall have the same authority to make the determination in clause (ii) in such State as the State would have under that clause. Any filtration requirement or schedule under this subparagraph shall be treated as if it were a requirement of a national primary drinking water regulation.

(v) As an additional alternative to the regulations promulgated pursuant to clauses (i) and (iii), including the criteria for avoiding filtration contained in 40 CFR 141.71, a State exercising primary enforcement responsibility for public water systems may, on a case-by-case basis, and after notice and opportunity for public comment, establish treatment requirements as an alternative to filtration in the case of systems having uninhabited, undeveloped watersheds in consolidated ownership, and having control over access to, and activities in, those watersheds, if the State determines (and the Ad-

ministrator concurs) that the quality of the source water and the alternative treatment requirements established by the State ensure greater removal or inactivation efficiencies of pathogenic organisms for which national primary drinking water regulations have been promulgated or that are of public health concern than would be achieved by the combination of filtration and chlorine disinfection (in compliance with this section).

(8) DISINFECTION.—At any time after the end of the 3-year period that begins on the date of enactment of the Safe Drinking Water Act Amendments of 1996, but not later than the date on which the Administrator promulgates a Stage II rulemaking for disinfectants and disinfection byproducts (as described in paragraph (2)(C)), the Administrator shall also promulgate national primary drinking water regulations requiring disinfection as a treatment technique for all public water systems, including surface water systems and, as necessary, ground water systems. After consultation with the States, the Administrator shall (as part of the regulations) promulgate criteria that the Administrator, or a State that has primary enforcement responsibility under section 1413, shall apply to determine whether disinfection shall be required as a treatment technique for any public water system served by ground water. The Administrator shall simultaneously promulgate a rule specifying criteria that will be used by the Administrator (or delegated State authorities) to grant variances from this requirement according to the provisions of sections 1415(a)(1)(B) and 1415(a)(3). In implementing section 1442(e) the Administrator or the delegated State authority shall, where appropriate, give special consideration to providing technical assistance to small public water systems in complying with the regulations promulgated under this paragraph.

(9) REVIEW AND REVISION.—The Administrator shall, not less often than every 6 years, review and revise, as appropriate, each national primary drinking water regulation promulgated under this title. Any revision of a national primary drinking water regulation shall be promulgated in accordance with this section, except that each revision shall maintain, or provide for greater, protection of the health of persons.

(10) EFFECTIVE DATE.—A national primary drinking water regulation promulgated under this section (and any amendment thereto) shall take effect on the date that is 3 years after the date on which the regulation is promulgated unless the Administrator determines that an earlier date is practicable, except that the Administrator, or a State (in the case of an individual system), may allow up to 2 additional years to comply with a maximum contaminant level or treatment technique if the Administrator or State (in the case of an individual system) determines that additional time is necessary for capital improvements.

(11) No national primary drinking water regulation may require the addition of any substance for preventive health care purposes unrelated to contamination of drinking water.

(12) CERTAIN CONTAMINANTS.—

(A) ARSENIC.—

(i) SCHEDULE AND STANDARD.—Notwithstanding the deadlines set forth in paragraph (1), the Administrator shall promulgate a national primary drinking water regulation for arsenic pursuant to this subsection, in accordance with the schedule established by this paragraph.

(ii) STUDY PLAN.—Not later than 180 days after the date of enactment of this paragraph, the Administrator shall develop a comprehensive plan for study in support of drinking water rulemaking to reduce the uncertainty in assessing health risks associated with exposure to low levels of arsenic. In conducting such study, the Administrator shall consult with the National Academy of Sciences, other Federal agencies, and interested public and private entities.

(iii) COOPERATIVE AGREEMENTS.—In carrying out the study plan, the Administrator may enter into cooperative agreements with other Federal agencies, State and local governments, and other interested public and private entities.

(iv) PROPOSED REGULATIONS.—The Administrator shall propose a national primary drinking water regulation for arsenic not later than January 1, 2000.

(v) FINAL REGULATIONS.—Not later than January 1, 2001, after notice and opportunity for public comment, the Administrator shall promulgate a national primary drinking water regulation for arsenic.

(vi) AUTHORIZATION.—There are authorized to be appropriated \$2,500,000 for each of fiscal years 1997 through 2000 for the studies required by this paragraph.

(B) SULFATE.—

(i) ADDITIONAL STUDY.—Prior to promulgating a national primary drinking water regulation for sulfate, the Administrator and the Director of the Centers for Disease Control and Prevention shall jointly conduct an additional study to establish a reliable dose-response relationship for the adverse human health effects that may result from exposure to sulfate in drinking water, including the health effects that may be experienced by groups within the general population (including infants and travelers) that are potentially at greater risk of adverse health effects as the result of such exposure. The study shall be conducted in consultation with interested States, shall be based on the best available, peer-reviewed science and supporting studies conducted in accordance with sound and objective scientific practices, and shall be completed not later than 30 months after the date of enactment of the Safe Drinking Water Act Amendments of 1996.

(ii) DETERMINATION.—The Administrator shall include sulfate among the 5 or more contaminants for which a determination is made pursuant to paragraph (3)(B) not later

than 5 years after the date of enactment of the Safe Drinking Water Act Amendments of 1996.

(iii) PROPOSED AND FINAL RULE.—Notwithstanding the deadlines set forth in paragraph (2), the Administrator may, pursuant to the authorities of this subsection and after notice and opportunity for public comment, promulgate a final national primary drinking water regulation for sulfate. Any such regulation shall include requirements for public notification and options for the provision of alternative water supplies to populations at risk as a means of complying with the regulation in lieu of a best available treatment technology or other means.

(13) RADON IN DRINKING WATER.—

(A) NATIONAL PRIMARY DRINKING WATER REGULATION.—Notwithstanding paragraph (2), the Administrator shall withdraw any national primary drinking water regulation for radon proposed prior to the date of enactment of this paragraph and shall propose and promulgate a regulation for radon under this section, as amended by the Safe Drinking Water Act Amendments of 1996.

(B) RISK ASSESSMENT AND STUDIES.—

(i) ASSESSMENT BY NAS.—Prior to proposing a national primary drinking water regulation for radon, the Administrator shall arrange for the National Academy of Sciences to prepare a risk assessment for radon in drinking water using the best available science in accordance with the requirements of paragraph (3). The risk assessment shall consider each of the risks associated with exposure to radon from drinking water and consider studies on the health effects of radon at levels and under conditions likely to be experienced through residential exposure. The risk assessment shall be peer-reviewed.

(ii) STUDY OF OTHER MEASURES.—The Administrator shall arrange for the National Academy of Sciences to prepare an assessment of the health risk reduction benefits associated with various mitigation measures to reduce radon levels in indoor air. The assessment may be conducted as part of the risk assessment authorized by clause (i) and shall be used by the Administrator to prepare the guidance and approve State programs under subparagraph (G).

(iii) OTHER ORGANIZATION.—If the National Academy of Sciences declines to prepare the risk assessment or studies required by this subparagraph, the Administrator shall enter into a contract or cooperative agreement with another independent, scientific organization to prepare such assessments or studies.

(C) HEALTH RISK REDUCTION AND COST ANALYSIS.—Not later than 30 months after the date of enactment of this paragraph, the Administrator shall publish, and seek public comment on, a health risk reduction and cost analysis meeting the requirements of paragraph (3)(C) for potential maximum contaminant levels that are being considered for radon in drinking water. The Administrator shall include

a response to all significant public comments received on the analysis with the preamble for the proposed rule published under subparagraph (D).

(D) PROPOSED REGULATION.—Not later than 36 months after the date of enactment of this paragraph, the Administrator shall propose a maximum contaminant level goal and a national primary drinking water regulation for radon pursuant to this section.

(E) FINAL REGULATION.—Not later than 12 months after the date of the proposal under subparagraph (D), the Administrator shall publish a maximum contaminant level goal and promulgate a national primary drinking water regulation for radon pursuant to this section based on the risk assessment prepared pursuant to subparagraph (B) and the health risk reduction and cost analysis published pursuant to subparagraph (C). In considering the risk assessment and the health risk reduction and cost analysis in connection with the promulgation of such a standard, the Administrator shall take into account the costs and benefits of control programs for radon from other sources.

(F) ALTERNATIVE MAXIMUM CONTAMINANT LEVEL.—If the maximum contaminant level for radon in drinking water promulgated pursuant to subparagraph (E) is more stringent than necessary to reduce the contribution to radon in indoor air from drinking water to a concentration that is equivalent to the national average concentration of radon in outdoor air, the Administrator shall, simultaneously with the promulgation of such level, promulgate an alternative maximum contaminant level for radon that would result in a contribution of radon from drinking water to radon levels in indoor air equivalent to the national average concentration of radon in outdoor air. If the Administrator promulgates an alternative maximum contaminant level under this subparagraph, the Administrator shall, after notice and opportunity for public comment and in consultation with the States, publish guidelines for State programs, including criteria for multimedia measures to mitigate radon levels in indoor air, to be used by the States in preparing programs under subparagraph (G). The guidelines shall take into account data from existing radon mitigation programs and the assessment of mitigation measures prepared under subparagraph (B).

(G) MULTIMEDIA RADON MITIGATION PROGRAMS.—

(i) IN GENERAL.—A State may develop and submit a multimedia program to mitigate radon levels in indoor air for approval by the Administrator under this subparagraph. If, after notice and the opportunity for public comment, such program is approved by the Administrator, public water systems in the State may comply with the alternative maximum contaminant level promulgated under subparagraph (F) in lieu of the maximum contaminant level in the national primary drinking water regulation promulgated under subparagraph (E).

(ii) ELEMENTS OF PROGRAMS.—State programs may rely on a variety of mitigation measures including public education, testing, training, technical assistance, remediation grant and loan or incentive programs, or other regulatory or nonregulatory measures. The effectiveness of elements in State programs shall be evaluated by the Administrator based on the assessment prepared by the National Academy of Sciences under subparagraph (B) and the guidelines published by the Administrator under subparagraph (F).

(iii) APPROVAL.—The Administrator shall approve a State program submitted under this paragraph if the health risk reduction benefits expected to be achieved by the program are equal to or greater than the health risk reduction benefits that would be achieved if each public water system in the State complied with the maximum contaminant level promulgated under subparagraph (E). The Administrator shall approve or disapprove a program submitted under this paragraph within 180 days of receipt. A program that is not disapproved during such period shall be deemed approved. A program that is disapproved may be modified to address the objections of the Administrator and be resubmitted for approval.

(iv) REVIEW.—The Administrator shall periodically, but not less often than every 5 years, review each multimedia mitigation program approved under this subparagraph to determine whether it continues to meet the requirements of clause (iii) and shall, after written notice to the State and an opportunity for the State to correct any deficiency in the program, withdraw approval of programs that no longer comply with such requirements.

(v) EXTENSION.—If, within 90 days after the promulgation of an alternative maximum contaminant level under subparagraph (F), the Governor of a State submits a letter to the Administrator committing to develop a multimedia mitigation program under this subparagraph, the effective date of the national primary drinking water regulation for radon in the State that would be applicable under paragraph (10) shall be extended for a period of 18 months.

(vi) LOCAL PROGRAMS.—In the event that a State chooses not to submit a multimedia mitigation program for approval under this subparagraph or has submitted a program that has been disapproved, any public water system in the State may submit a program for approval by the Administrator according to the same criteria, conditions, and approval process that would apply to a State program. The Administrator shall approve a multimedia mitigation program if the health risk reduction benefits expected to be achieved by the program are equal to or greater than the health risk reduction benefits that would result

from compliance by the public water system with the maximum contaminant level for radon promulgated under subparagraph (E).

(14) RECYCLING OF FILTER BACKWASH.—The Administrator shall promulgate a regulation to govern the recycling of filter backwash water within the treatment process of a public water system. The Administrator shall promulgate such regulation not later than 4 years after the date of enactment of the Safe Drinking Water Act Amendments of 1996 unless such recycling has been addressed by the Administrator's Enhanced Surface Water Treatment Rule prior to such date.

(15) VARIANCE TECHNOLOGIES.—

(A) IN GENERAL.—At the same time as the Administrator promulgates a national primary drinking water regulation for a contaminant pursuant to this section, the Administrator shall issue guidance or regulations describing the best treatment technologies, treatment techniques, or other means (referred to in this paragraph as “variance technology”) for the contaminant that the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available and affordable, as determined by the Administrator in consultation with the States, for public water systems of varying size, considering the quality of the source water to be treated. The Administrator shall identify such variance technologies for public water systems serving—

(i) a population of 10,000 or fewer but more than 3,300;

(ii) a population of 3,300 or fewer but more than 500; and

(iii) a population of 500 or fewer but more than 25, if, considering the quality of the source water to be treated, no treatment technology is listed for public water systems of that size under paragraph (4)(E). Variance technologies identified by the Administrator pursuant to this paragraph may not achieve compliance with the maximum contaminant level or treatment technique requirement of such regulation, but shall achieve the maximum reduction or inactivation efficiency that is affordable considering the size of the system and the quality of the source water. The guidance or regulations shall not require the use of a technology from a specific manufacturer or brand.

(B) LIMITATION.—The Administrator shall not identify any variance technology under this paragraph, unless the Administrator has determined, considering the quality of the source water to be treated and the expected useful life of the technology, that the variance technology is protective of public health.

(C) ADDITIONAL INFORMATION.—The Administrator shall include in the guidance or regulations identifying variance technologies under this paragraph any assumptions supporting the public health determination referred to in subparagraph (B), where such assumptions concern the public water system to which the technology may be applied, or its source waters. The Administrator shall provide any as-

sumptions used in determining affordability, taking into consideration the number of persons served by such systems. The Administrator shall provide as much reliable information as practicable on performance, effectiveness, limitations, costs, and other relevant factors including the applicability of variance technology to waters from surface and underground sources.

(D) REGULATIONS AND GUIDANCE.—Not later than 2 years after the date of enactment of this paragraph and after consultation with the States, the Administrator shall issue guidance or regulations under subparagraph (A) for each national primary drinking water regulation promulgated prior to the date of enactment of this paragraph for which a variance may be granted under section 1415(e). The Administrator may, at any time after a national primary drinking water regulation has been promulgated, issue guidance or regulations describing additional variance technologies. The Administrator shall, not less often than every 7 years, or upon receipt of a petition supported by substantial information, review variance technologies identified under this paragraph. The Administrator shall issue revised guidance or regulations if new or innovative variance technologies become available that meet the requirements of this paragraph and achieve an equal or greater reduction or inactivation efficiency than the variance technologies previously identified under this subparagraph. No public water system shall be required to replace a variance technology during the useful life of the technology for the sole reason that a more efficient variance technology has been listed under this subparagraph.

(16) *PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES.*—

(A) *IN GENERAL.*—Not later than 2 years after the date of enactment of this paragraph, the Administrator shall, after notice and opportunity for public comment, promulgate a national primary drinking water regulation for perfluoroalkyl and polyfluoroalkyl substances, which shall, at a minimum, include standards for—

(i) perfluorooctanoic acid (commonly referred to as “PFOA”); and

(ii) perfluorooctane sulfonic acid (commonly referred to as “PFOS”).

(B) *ALTERNATIVE PROCEDURES.*—

(i) *IN GENERAL.*—Not later than 1 year after the validation by the Administrator of an equally effective quality control and testing procedure to ensure compliance with the national primary drinking water regulation promulgated under subparagraph (A) to measure the levels described in clause (ii) or other methods to detect and monitor perfluoroalkyl and polyfluoroalkyl substances in drinking water, the Administrator shall add the procedure or method as an alternative to the quality control and testing procedure described in such national primary drinking water regulation by publishing the procedure or method in the Federal Register in accordance with section 1401(1)(D).

(ii) *LEVELS DESCRIBED.*—The levels referred to in clause (i) are—

(I) the level of a perfluoroalkyl or polyfluoroalkyl substance;

(II) the total levels of perfluoroalkyl and polyfluoroalkyl substances; and

(III) the total levels of organic fluorine.

(C) *INCLUSIONS.*—The Administrator may include a perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances on—

(i) the list of contaminants for consideration of regulation under paragraph (1)(B)(i), in accordance with such paragraph; and

(ii) the list of unregulated contaminants to be monitored under section 1445(a)(2)(B)(i), in accordance with such section.

(D) *MONITORING.*—When establishing monitoring requirements for public water systems as part of a national primary drinking water regulation under subparagraph (A) or subparagraph (G)(ii), the Administrator shall tailor the monitoring requirements for public water systems that do not detect or are reliably and consistently below the maximum contaminant level (as defined in section 1418(b)(2)(B)) for the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances subject to the national primary drinking water regulation.

(E) *HEALTH PROTECTION.*—The national primary drinking water regulation promulgated under subparagraph (A) shall be protective of the health of subpopulations at greater risk, as described in section 1458.

(F) *HEALTH RISK REDUCTION AND COST ANALYSIS.*—In meeting the requirements of paragraph (3)(C), the Administrator may rely on information available to the Administrator with respect to one or more specific perfluoroalkyl or polyfluoroalkyl substances to extrapolate reasoned conclusions regarding the health risks and effects of a class of perfluoroalkyl or polyfluoroalkyl substances of which the specific perfluoroalkyl or polyfluoroalkyl substances are a part.

(G) *REGULATION OF ADDITIONAL SUBSTANCES.*—

(i) *DETERMINATION.*—The Administrator shall make a determination under paragraph (1)(A), using the criteria described in clauses (i) through (iii) of that paragraph, whether to include a perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances in the national primary drinking water regulation under subparagraph (A) not later than 18 months after the later of—

(I) the date on which the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances is listed on the list of contaminants for consideration of regulation under paragraph (1)(B)(i); and

(II) the date on which—

(aa) the Administrator has received the results of monitoring under section 1445(a)(2)(B) for the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances; or

(bb) the Administrator has received reliable water data or water monitoring surveys for the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances from a Federal or State agency that the Administrator determines to be of a quality sufficient to make a determination under paragraph (1)(A).

(ii) PRIMARY DRINKING WATER REGULATIONS.—

(I) IN GENERAL.—For each perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances that the Administrator determines to regulate under clause (i), the Administrator—

(aa) not later than 18 months after the date on which the Administrator makes the determination, shall propose a national primary drinking water regulation for the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances; and

(bb) may publish the proposed national primary drinking water regulation described in item (aa) concurrently with the publication of the determination to regulate the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances.

(II) DEADLINE.—

(aa) IN GENERAL.—Not later than 1 year after the date on which the Administrator publishes a proposed national primary drinking water regulation under clause (i)(I) and subject to item (bb), the Administrator shall take final action on the proposed national primary drinking water regulation.

(bb) EXTENSION.—The Administrator, on publication of notice in the Federal Register, may extend the deadline under item (aa) by not more than 6 months.

(H) HEALTH ADVISORY.—

(i) IN GENERAL.—Subject to clause (ii), the Administrator shall publish a health advisory under paragraph (1)(F) for a perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances not subject to a national primary drinking water regulation not later than 1 year after the later of—

(I) the date on which the Administrator finalizes a toxicity value for the perfluoroalkyl or

polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances; and

(II) the date on which the Administrator validates an effective quality control and testing procedure for the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances.

(ii) WAIVER.—The Administrator may waive the requirements of clause (i) with respect to a perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl and polyfluoroalkyl substances if the Administrator determines that there is a substantial likelihood that the perfluoroalkyl or polyfluoroalkyl substance or class of perfluoroalkyl or polyfluoroalkyl substances will not occur in drinking water with sufficient frequency to justify the publication of a health advisory, and publishes such determination, including the information and analysis used, and basis for, such determination, in the Federal Register.

(c) The Administrator shall publish proposed national secondary drinking water regulations within 270 days after the date of enactment of this title. Within 90 days after publication of any such regulation, he shall promulgate such regulation with such modifications as he deems appropriate. Regulations under this subsection may be amended from time to time.

(d) Regulations under this section shall be prescribed in accordance with section 553 of title 5, United States Code (relating to rulemaking), except that the Administrator shall provide opportunity for public hearing prior to promulgation of such regulations. In proposing and promulgating regulations under this section, the Administrator shall consult with the Secretary and the National Drinking Water Advisory Council.

(e) The Administrator shall request comments from the Science Advisory Board (established under the Environmental Research, Development, and Demonstration Act of 1978) prior to proposal of a maximum contaminant level goal and national primary drinking water regulation. The Board shall respond, as it deems appropriate, within the time period applicable for promulgation of the national primary drinking water standard concerned. This subsection shall, under no circumstances, be used to delay final promulgation of any national primary drinking water standard.

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PART E—GENERAL PROVISIONS

* * * * *

STATE REVOLVING LOAN FUNDS

SEC. 1452. (a) GENERAL AUTHORITY.—

(1) GRANTS TO STATES TO ESTABLISH STATE LOAN FUNDS.—

(A) IN GENERAL.—The Administrator shall offer to enter into agreements with eligible States to make capitalization grants, including letters of credit, to the States under this subsection to further the health protection objectives of

this title, promote the efficient use of fund resources, and for other purposes as are specified in this title.

(B) ESTABLISHMENT OF FUND.—To be eligible to receive a capitalization grant under this section, a State shall establish a drinking water treatment revolving loan fund (referred to in this section as a “State loan fund”) and comply with the other requirements of this section. Each grant to a State under this section shall be deposited in the State loan fund established by the State, except as otherwise provided in this section and in other provisions of this title. No funds authorized by other provisions of this title to be used for other purposes specified in this title shall be deposited in any State loan fund.

(C) EXTENDED PERIOD.—The grant to a State shall be available to the State for obligation during the fiscal year for which the funds are authorized and during the following fiscal year, except that grants made available from funds provided prior to fiscal year 1997 shall be available for obligation during each of the fiscal years 1997 and 1998.

(D) ALLOTMENT FORMULA.—Except as otherwise provided in this section, funds made available to carry out this section shall be allotted to States that have entered into an agreement pursuant to this section (other than the District of Columbia) in accordance with—

(i) for each of fiscal years 1995 through 1997, a formula that is the same as the formula used to distribute public water system supervision grant funds under section 1443 in fiscal year 1995, except that the minimum proportionate share established in the formula shall be 1 percent of available funds and the formula shall be adjusted to include a minimum proportionate share for the State of Wyoming and the District of Columbia; and

(ii) for fiscal year 1998 and each subsequent fiscal year, a formula that allocates to each State the proportional share of the State needs identified in the most recent survey conducted pursuant to subsection (h), except that the minimum proportionate share provided to each State shall be the same as the minimum proportionate share provided under clause (i).

(E) REALLOTMENT.—The grants not obligated by the last day of the period for which the grants are available shall be reallocated according to the appropriate criteria set forth in subparagraph (D), except that the Administrator may reserve and allocate 10 percent of the remaining amount for financial assistance to Indian Tribes in addition to the amount allotted under subsection (i) and none of the funds reallocated by the Administrator shall be reallocated to any State that has not obligated all sums allotted to the State pursuant to this section during the period in which the sums were available for obligation.

(F) NONPRIMACY STATES.—The State allotment for a State not exercising primary enforcement responsibility for public water systems shall not be deposited in any such

fund but shall be allotted by the Administrator under this subparagraph. Pursuant to section 1443(a)(9)(A) such sums allotted under this subparagraph shall be reserved as needed by the Administrator to exercise primary enforcement responsibility under this title in such State and the remainder shall be reallocated to States exercising primary enforcement responsibility for public water systems for deposit in such funds. Whenever the Administrator makes a final determination pursuant to section 1413(b) that the requirements of section 1413(a) are no longer being met by a State, additional grants for such State under this title shall be immediately terminated by the Administrator. This subparagraph shall not apply to any State not exercising primary enforcement responsibility for public water systems as of the date of enactment of the Safe Drinking Water Act Amendments of 1996.

(G) OTHER PROGRAMS.—

(i) NEW SYSTEM CAPACITY.—Beginning in fiscal year 1999, the Administrator shall withhold 20 percent of each capitalization grant made pursuant to this section to a State unless the State has met the requirements of section 1420(a) (relating to capacity development) and shall withhold 10 percent for fiscal year 2001, 15 percent for fiscal year 2002, and 20 percent for fiscal year 2003 if the State has not complied with the provisions of section 1420(c) (relating to capacity development strategies). Not more than a total of 20 percent of the capitalization grants made to a State in any fiscal year may be withheld under the preceding provisions of this clause. All funds withheld by the Administrator pursuant to this clause shall be reallocated by the Administrator on the basis of the same ratio as is applicable to funds allotted under subparagraph (D). None of the funds reallocated by the Administrator pursuant to this paragraph shall be allotted to a State unless the State has met the requirements of section 1420 (relating to capacity development).

(ii) OPERATOR CERTIFICATION.—The Administrator shall withhold 20 percent of each capitalization grant made pursuant to this section unless the State has met the requirements of 1419 (relating to operator certification). All funds withheld by the Administrator pursuant to this clause shall be reallocated by the Administrator on the basis of the same ratio as applicable to funds allotted under subparagraph (D). None of the funds reallocated by the Administrator pursuant to this paragraph shall be allotted to a State unless the State has met the requirements of section 1419 (relating to operator certification).

(2) USE OF FUNDS.—

(A) IN GENERAL.—Except as otherwise authorized by this title, amounts deposited in a State loan fund, including loan repayments and interest earned on such amounts, shall be used only for providing loans or loan guarantees, or as a source of reserve and security for leveraged loans,

the proceeds of which are deposited in a State loan fund established under paragraph (1), or other financial assistance authorized under this section to community water systems and nonprofit noncommunity water systems, other than systems owned by Federal agencies.

(B) LIMITATION.—Financial assistance under this section may be used by a public water system only for expenditures (including expenditures for planning, design, siting, and associated preconstruction activities, or for replacing or rehabilitating aging treatment, storage, or distribution facilities of public water systems, but not including monitoring, operation, and maintenance expenditures) of a type or category which the Administrator has determined, through guidance, will facilitate compliance with national primary drinking water regulations applicable to the system under section 1412 or otherwise significantly further the health protection objectives of this title.

(C) SALE OF BONDS.—Funds may also be used by a public water system as a source of revenue (restricted solely to interest earnings of the applicable State loan fund) or security for payment of the principal and interest on revenue or general obligation bonds issued by the State to provide matching funds under subsection (e), if the proceeds of the sale of the bonds will be deposited in the State loan fund.

(D) WATER TREATMENT LOANS.—The funds under this section may also be used to provide loans to a system referred to in section 1401(4)(B) for the purpose of providing the treatment described in section 1401(4)(B)(i)(III).

(E) ACQUISITION OF REAL PROPERTY.—The funds under this section shall not be used for the acquisition of real property or interests therein, unless the acquisition is integral to a project authorized by this paragraph and the purchase is from a willing seller.

(F) LOAN ASSISTANCE.—Of the amount credited to any State loan fund established under this section in any fiscal year, 15 percent shall be available solely for providing loan assistance to public water systems which regularly serve fewer than 10,000 persons to the extent such funds can be obligated for eligible projects of public water systems.

(G) EMERGING CONTAMINANTS.—

(i) IN GENERAL.—Notwithstanding any other provision of law and subject to clause (ii), amounts deposited under subsection (t) in a State loan fund established under this section may only be used to provide grants for the purpose of addressing emerging contaminants, with a focus on perfluoroalkyl and polyfluoroalkyl substances.

(ii) REQUIREMENTS.—

(I) SMALL AND DISADVANTAGED COMMUNITIES.—Not less than 25 percent of the amounts described in clause (i) shall be used to provide grants to—

(aa) disadvantaged communities (as defined in subsection (d)(3)); or

(bb) public water systems serving fewer than 25,000 persons.

(II) PRIORITIES.—In selecting the recipient of a grant using amounts described in clause (i), a State shall use the priorities described in subsection (b)(3)(A).

(iii) NO INCREASED BONDING AUTHORITY.—The amounts deposited in the State loan fund of a State under subsection (t) may not be used as a source of payment of, or security for (directly or indirectly), in whole or in part, any obligation the interest on which is exempt from the tax imposed under chapter 1 of the Internal Revenue Code of 1986.

(3) LIMITATION.—

(A) IN GENERAL.—Except as provided in subparagraph (B), no assistance under this section shall be provided to a public water system that—

(i) does not have the technical, managerial, and financial capability to ensure compliance with the requirements of this title; or

(ii) is in significant noncompliance with any requirement of a national primary drinking water regulation or variance.

(B) RESTRUCTURING.—A public water system described in subparagraph (A) may receive assistance under this section if—

(i) the use of the assistance will ensure compliance; and

(ii) if subparagraph (A)(i) applies to the system, the owner or operator of the system agrees to undertake feasible and appropriate changes in operations (including ownership, management, accounting, rates, maintenance, consolidation, alternative water supply, or other procedures) if the State determines that the measures are necessary to ensure that the system has the technical, managerial, and financial capability to comply with the requirements of this title over the long term.

(C) REVIEW.—Prior to providing assistance under this section to a public water system that is in significant noncompliance with any requirement of a national primary drinking water regulation or variance, the State shall conduct a review to determine whether subparagraph (A)(i) applies to the system.

(4) AMERICAN IRON AND STEEL PRODUCTS.—

(A) IN GENERAL.—During fiscal years 2019 through 2023, funds made available from a State loan fund established pursuant to this section may not be used for a project for the construction, alteration, or repair of a public water system unless all of the iron and steel products used in the project are produced in the United States.

(B) DEFINITION OF IRON AND STEEL PRODUCTS.—In this paragraph, the term “iron and steel products” means the following products made primarily of iron or steel:

(i) Lined or unlined pipes and fittings.

- (ii) Manhole covers and other municipal castings.
- (iii) Hydrants.
- (iv) Tanks.
- (v) Flanges.
- (vi) Pipe clamps and restraints.
- (vii) Valves.
- (viii) Structural steel.
- (ix) Reinforced precast concrete.
- (x) Construction materials.

(C) APPLICATION.—Subparagraph (A) shall be waived in any case or category of cases in which the Administrator finds that—

- (i) applying subparagraph (A) would be inconsistent with the public interest;
- (ii) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or
- (iii) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(D) WAIVER.—If the Administrator receives a request for a waiver under this paragraph, the Administrator shall make available to the public, on an informal basis, a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet site of the Agency.

(E) INTERNATIONAL AGREEMENTS.—This paragraph shall be applied in a manner consistent with United States obligations under international agreements.

(F) MANAGEMENT AND OVERSIGHT.—The Administrator may retain up to 0.25 percent of the funds appropriated for this section for management and oversight of the requirements of this paragraph.

(G) EFFECTIVE DATE.—This paragraph does not apply with respect to a project if a State agency approves the engineering plans and specifications for the project, in that agency's capacity to approve such plans and specifications prior to a project requesting bids, prior to the date of enactment of this paragraph.

(5) PREVAILING WAGES.—The requirements of section 1450(e) shall apply to any construction project carried out in whole or in part with assistance made available by a State loan fund.

(b) INTENDED USE PLANS.—

(1) IN GENERAL.—After providing for public review and comment, each State that has entered into a capitalization agreement pursuant to this section shall annually prepare a plan that identifies the intended uses of the amounts available to the State loan fund of the State.

(2) CONTENTS.—An intended use plan shall include—

- (A) a list of the projects to be assisted in the first fiscal year that begins after the date of the plan, including a de-

scription of the project, the expected terms of financial assistance, and the size of the community served;

(B) the criteria and methods established for the distribution of funds; and

(C) a description of the financial status of the State loan fund and the short-term and long-term goals of the State loan fund.

(3) USE OF FUNDS.—

(A) IN GENERAL.—An intended use plan shall provide, to the maximum extent practicable, that priority for the use of funds be given to projects that—

(i) address the most serious risk to human health;

(ii) are necessary to ensure compliance with the requirements of this title (including requirements for filtration); and

(iii) assist systems most in need on a per household basis according to State affordability criteria.

(B) LIST OF PROJECTS.—Each State shall, after notice and opportunity for public comment, publish and periodically update a list of projects in the State that are eligible for assistance under this section, including the priority assigned to each project and, to the extent known, the expected funding schedule for each project.

(c) FUND MANAGEMENT.—Each State loan fund under this section shall be established, maintained, and credited with repayments and interest. The fund corpus shall be available in perpetuity for providing financial assistance under this section. To the extent amounts in the fund are not required for current obligation or expenditure, such amounts shall be invested in interest bearing obligations.

(d) ASSISTANCE FOR DISADVANTAGED COMMUNITIES.—

(1) LOAN SUBSIDY.—Notwithstanding any other provision of this section, in any case in which the State makes a loan pursuant to subsection (a)(2) to a disadvantaged community or to a community that the State expects to become a disadvantaged community as the result of a proposed project, the State may provide additional subsidization (including forgiveness of principal).

(2) TOTAL AMOUNT OF SUBSIDIES.—For each fiscal year, of the amount of the capitalization grant received by the State for the year, the total amount of loan subsidies made by a State pursuant to paragraph (1)—

(A) may not exceed 35 percent; and

(B) to the extent that there are sufficient applications for loans to communities described in paragraph (1), may not be less than 6 percent.

(3) DEFINITION OF DISADVANTAGED COMMUNITY.—In this subsection, the term “disadvantaged community” means the service area of a public water system that meets affordability criteria established after public review and comment by the State in which the public water system is located. The Administrator may publish information to assist States in establishing affordability criteria.

(e) STATE CONTRIBUTION.—Each agreement under subsection (a) shall require that the State deposit in the State loan fund from

State moneys an amount equal to at least 20 percent of the total amount of the grant to be made to the State on or before the date on which the grant payment is made to the State, except that a State shall not be required to deposit such amount into the fund prior to the date on which each grant payment is made for fiscal years 1994, 1995, 1996, and 1997 if the State deposits the State contribution amount into the State loan fund prior to September 30, 1999.

(f) TYPES OF ASSISTANCE.—Except as otherwise limited by State law, the amounts deposited into a State loan fund under this section may be used only—

(1) to make loans, on the condition that—

(A) the interest rate for each loan is less than or equal to the market interest rate, including an interest free loan;

(B) principal and interest payments on each loan will commence not later than 18 months after completion of the project for which the loan was made;

(C) each loan will be fully amortized not later than 30 years after the completion of the project, except that in the case of a disadvantaged community (as defined in subsection (d)(3)) a State may provide an extended term for a loan, if the extended term—

(i) terminates not later than the date that is 40 years after the date of project completion; and

(ii) does not exceed the expected design life of the project;

(D) the recipient of each loan will establish a dedicated source of revenue (or, in the case of a privately owned system, demonstrate that there is adequate security) for the repayment of the loan; and

(E) the State loan fund will be credited with all payments of principal and interest on each loan;

(2) to buy or refinance the debt obligation of a municipality or an intermunicipal or interstate agency within the State at an interest rate that is less than or equal to the market interest rate in any case in which a debt obligation is incurred after July 1, 1993;

(3) to guarantee, or purchase insurance for, a local obligation (all of the proceeds of which finance a project eligible for assistance under this section) if the guarantee or purchase would improve credit market access or reduce the interest rate applicable to the obligation;

(4) as a source of revenue or security for the payment of principal and interest on revenue or general obligation bonds issued by the State if the proceeds of the sale of the bonds will be deposited into the State loan fund; and

(5) to earn interest on the amounts deposited into the State loan fund.

(g) ADMINISTRATION OF STATE LOAN FUNDS.—

(1) COMBINED FINANCIAL ADMINISTRATION.—Notwithstanding subsection (c), a State may (as a convenience and to avoid unnecessary administrative costs) combine, in accordance with State law, the financial administration of a State loan fund established under this section with the financial administration of any other revolving fund established by the State if other-

wise not prohibited by the law under which the State loan fund was established and if the Administrator determines that—

(A) the grants under this section, together with loan repayments and interest, will be separately accounted for and used solely for the purposes specified in subsection (a); and

(B) the authority to establish assistance priorities and carry out oversight and related activities (other than financial administration) with respect to assistance remains with the State agency having primary responsibility for administration of the State program under section 1413, after consultation with other appropriate State agencies (as determined by the State): *Provided*, That in nonprimacy States eligible to receive assistance under this section, the Governor shall determine which State agency will have authority to establish priorities for financial assistance from the State loan fund.

(2) COST OF ADMINISTERING FUND.—

(A) AUTHORIZATION.—

(i) IN GENERAL.—For each fiscal year, a State may use the amount described in clause (ii)—

(I) to cover the reasonable costs of administration of the programs under this section, including the recovery of reasonable costs expended to establish a State loan fund that are incurred after the date of enactment of this section; and

(II) to provide technical assistance to public water systems within the State.

(ii) DESCRIPTION OF AMOUNT.—The amount referred to in clause (i) is an amount equal to the sum of—

(I) the amount of any fees collected by the State for use in accordance with clause (i)(I), regardless of the source; and

(II) the greatest of—

(aa) \$400,000;

(bb) $\frac{1}{5}$ percent of the current valuation of the fund; and

(cc) an amount equal to 4 percent of all grant awards to the fund under this section for the fiscal year.

(B) ADDITIONAL USE OF FUNDS.—For fiscal year 1995 and each fiscal year thereafter, each State may use up to an additional 10 percent of the funds allotted to the State under this section—

(i) for public water system supervision programs under section 1443(a);

(ii) to administer or provide technical assistance through source water protection programs;

(iii) to develop and implement a capacity development strategy under section 1420(c); and

(iv) for an operator certification program for purposes of meeting the requirements of section 1419.

(C) TECHNICAL ASSISTANCE.—An additional 2 percent of the funds annually allotted to each State under this section may be used by the State to provide technical assist-

ance to public water systems serving 10,000 or fewer persons in the State.

(D) ENFORCEMENT ACTIONS.—Funds used under subparagraph (B)(ii) shall not be used for enforcement actions.

(3) GUIDANCE AND REGULATIONS.—The Administrator shall publish guidance and promulgate regulations as may be necessary to carry out the provisions of this section, including—

(A) provisions to ensure that each State commits and expends funds allotted to the State under this section as efficiently as possible in accordance with this title and applicable State laws;

(B) guidance to prevent waste, fraud, and abuse; and

(C) guidance to avoid the use of funds made available under this section to finance the expansion of any public water system in anticipation of future population growth. The guidance and regulations shall also ensure that the States, and public water systems receiving assistance under this section, use accounting, audit, and fiscal procedures that conform to generally accepted accounting standards.

(4) STATE REPORT.—Each State administering a loan fund and assistance program under this subsection shall publish and submit to the Administrator a report every 2 years on its activities under this section, including the findings of the most recent audit of the fund and the entire State allotment. The Administrator shall periodically audit all State loan funds established by, and all other amounts allotted to, the States pursuant to this section in accordance with procedures established by the Comptroller General.

(h) NEEDS SURVEY.—(1) The Administrator shall conduct an assessment of water system capital improvement needs of all eligible public water systems in the United States and submit a report to the Congress containing the results of the assessment within 180 days after the date of enactment of the Safe Drinking Water Act Amendments of 1996 and every 4 years thereafter.

(2) Any assessment conducted under paragraph (1) after the date of enactment of America's Water Infrastructure Act of 2018 shall include an assessment of costs to replace all lead service lines (as defined in section 1459B(a)(4)) of all eligible public water systems in the United States, and such assessment shall describe separately the costs associated with replacing the portions of such lead service lines that are owned by an eligible public water system and the costs associated with replacing any remaining portions of such lead service lines, to the extent practicable.

(i) INDIAN TRIBES.—

(1) IN GENERAL.—1½ percent of the amounts appropriated annually to carry out this section may be used by the Administrator to make grants to Indian Tribes, Alaska Native villages, and, for the purpose of carrying out paragraph (5), intertribal consortia or tribal organizations, that have not otherwise received either grants from the Administrator under this section or assistance from State loan funds established under this section. Except as otherwise provided, the grants may only be used for expenditures by tribes and villages for public water system expenditures referred to in subsection (a)(2).

(2) USE OF FUNDS.—Funds reserved pursuant to paragraph (1) shall be used to address the most significant threats to public health associated with public water systems that serve Indian Tribes, as determined by the Administrator in consultation with the Director of the Indian Health Service and Indian Tribes.

(3) ALASKA NATIVE VILLAGES.—In the case of a grant for a project under this subsection in an Alaska Native village, the Administrator is also authorized to make grants to the State of Alaska for the benefit of Native villages. An amount not to exceed 4 percent of the grant amount may be used by the State of Alaska for project management.

(4) NEEDS ASSESSMENT.—The Administrator, in consultation with the Director of the Indian Health Service and Indian Tribes, shall, in accordance with a schedule that is consistent with the needs surveys conducted pursuant to subsection (h), prepare surveys and assess the needs of drinking water treatment facilities to serve Indian Tribes, including an evaluation of the public water systems that pose the most significant threats to public health.

(5) TRAINING AND OPERATOR CERTIFICATION.—

(A) IN GENERAL.—The Administrator may use funds made available under this subsection and section 1442(e)(7) to make grants to intertribal consortia or tribal organizations for the purpose of providing operations and maintenance training and operator certification services to Indian Tribes to enable public water systems that serve Indian Tribes to achieve and maintain compliance with applicable national primary drinking water regulations.

(B) ELIGIBLE TRIBAL ORGANIZATIONS.—Intertribal consortia or tribal organizations eligible for a grant under subparagraph (A) are intertribal consortia or tribal organizations that—

(i) as determined by the Administrator, are the most qualified and experienced to provide training and technical assistance to Indian Tribes; and

(ii) the Indian Tribes find to be the most beneficial and effective.

(j) OTHER AREAS.—Of the funds annually available under this section for grants to States, the Administrator shall make allotments in accordance with section 1443(a)(4) for the Virgin Islands, the Commonwealth of the Northern Mariana Islands, American Samoa, and Guam. The grants allotted as provided in this subsection may be provided by the Administrator to the governments of such areas, to public water systems in such areas, or to both, to be used for the public water system expenditures referred to in subsection (a)(2). The grants, and grants for the District of Columbia, shall not be deposited in State loan funds. The total allotment of grants under this section for all areas described in this subsection in any fiscal year shall not exceed 0.33 percent of the aggregate amount made available to carry out this section in that fiscal year.

(k) OTHER AUTHORIZED ACTIVITIES.—

(1) IN GENERAL.—Notwithstanding subsection (a)(2), a State may take each of the following actions:

(A) Provide assistance, only in the form of a loan, to one or more of the following:

(i) Any public water system described in subsection (a)(2) to acquire land or a conservation easement from a willing seller or grantor, if the purpose of the acquisition is to protect the source water of the system from contamination and to ensure compliance with national primary drinking water regulations.

(ii) Any community water system to implement local, voluntary source water protection measures to protect source water in areas delineated pursuant to section 1453, in order to facilitate compliance with national primary drinking water regulations applicable to the system under section 1412 or otherwise significantly further the health protection objectives of this title. Funds authorized under this clause may be used to fund only voluntary, incentive-based mechanisms.

(iii) Any community water system to provide funding in accordance with section 1454(a)(1)(B)(i).

(B) Provide assistance, including technical and financial assistance, to any public water system as part of a capacity development strategy developed and implemented in accordance with section 1420(c).

(C) Make expenditures from the capitalization grant of the State to delineate, assess, and update assessments for source water protection areas in accordance with section 1453, except that funds set aside for such expenditure shall be obligated within 4 fiscal years.

(D) Make expenditures from the fund for the establishment and implementation of wellhead protection programs under section 1428 and for the implementation of efforts (other than actions authorized under subparagraph (A)) to protect source water in areas delineated pursuant to section 1453.

(2) LIMITATION.—For each fiscal year, the total amount of assistance provided and expenditures made by a State under this subsection may not exceed 15 percent of the amount of the capitalization grant received by the State for that year and may not exceed 10 percent of that amount for any one of the following activities:

(A) To acquire land or conservation easements pursuant to paragraph (1)(A)(i).

(B) To provide funding to implement voluntary, incentive-based source water quality protection measures pursuant to clauses (ii) and (iii) of paragraph (1)(A).

(C) To provide assistance through a capacity development strategy pursuant to paragraph (1)(B).

(D) To make expenditures to delineate or assess source water protection areas pursuant to paragraph (1)(C).

(E) To make expenditures to establish and implement wellhead protection programs, and to implement efforts to protect source water, pursuant to paragraph (1)(D).

(3) STATUTORY CONSTRUCTION.—Nothing in this section creates or conveys any new authority to a State, political subdivision of a State, or community water system for any new regu-

latory measure, or limits any authority of a State, political subdivision of a State or community water system.

(l) SAVINGS.—The failure or inability of any public water system to receive funds under this section or any other loan or grant program, or any delay in obtaining the funds, shall not alter the obligation of the system to comply in a timely manner with all applicable drinking water standards and requirements of this title.

(m) AUTHORIZATION OF APPROPRIATIONS.—

(1) There are authorized to be appropriated to carry out the purposes of this section, except for subsections (a)(2)(G) and (t)—

- (A) \$1,174,000,000 for fiscal year 2019;
- (B) \$1,300,000,000 for fiscal year 2020; and
- (C) \$1,950,000,000 for fiscal year 2021.

(2) To the extent amounts authorized to be appropriated under this subsection in any fiscal year are not appropriated in that fiscal year, such amounts are authorized to be appropriated in a subsequent fiscal year. Such sums shall remain available until expended.

(n) HEALTH EFFECTS STUDIES.—From funds appropriated pursuant to this section for each fiscal year, the Administrator shall reserve \$10,000,000 for health effects studies on drinking water contaminants authorized by the Safe Drinking Water Act Amendments of 1996. In allocating funds made available under this subsection, the Administrator shall give priority to studies concerning the health effects of cryptosporidium (as authorized by section 1458(c)), disinfection byproducts (as authorized by section 1458(c)), and arsenic (as authorized by section 1412(b)(12)(A)), and the implementation of a plan for studies of subpopulations at greater risk of adverse effects (as authorized by section 1458(a)).

(o) MONITORING FOR UNREGULATED CONTAMINANTS.—From funds appropriated pursuant to this section for each fiscal year beginning with fiscal year 1998, the Administrator shall reserve \$2,000,000 to pay the costs of monitoring for unregulated contaminants under section 1445(a)(2)(C).

(p) DEMONSTRATION PROJECT FOR STATE OF VIRGINIA.—Notwithstanding the other provisions of this section limiting the use of funds deposited in a State loan fund from any State allotment, the State of Virginia may, as a single demonstration and with the approval of the Virginia General Assembly and the Administrator, conduct a program to demonstrate alternative approaches to intergovernmental coordination to assist in the financing of new drinking water facilities in the following rural communities in southwestern Virginia where none exists on the date of enactment of the Safe Drinking Water Act Amendments of 1996 and where such communities are experiencing economic hardship: Lee County, Wise County, Scott County, Dickenson County, Russell County, Buchanan County, Tazewell County, and the city of Norton, Virginia. The funds allotted to that State and deposited in the State loan fund may be loaned to a regional endowment fund for the purpose set forth in this subsection under a plan to be approved by the Administrator. The plan may include an advisory group that includes representatives of such counties.

(q) SMALL SYSTEM TECHNICAL ASSISTANCE.—The Administrator may reserve up to 2 percent of the total funds made available to

carry out this section for each of fiscal years 2016 through 2021 to carry out the provisions of section 1442(e) (relating to technical assistance for small systems), except that the total amount of funds made available for such purpose in any fiscal year through appropriations (as authorized by section 1442(e)) and reservations made pursuant to this subsection shall not exceed the amount authorized by section 1442(e).

(r) EVALUATION.—The Administrator shall conduct an evaluation of the effectiveness of the State loan funds through fiscal year 2001. The evaluation shall be submitted to the Congress at the same time as the President submits to the Congress, pursuant to section 1108 of title 31, United States Code, an appropriations request for fiscal year 2003 relating to the budget of the Environmental Protection Agency.

(s) BEST PRACTICES FOR STATE LOAN FUND ADMINISTRATION.—The Administrator shall—

(1) collect information from States on administration of State loan funds established pursuant to subsection (a)(1), including—

(A) efforts to streamline the process for applying for assistance through such State loan funds;

(B) programs in place to assist with the completion of applications for assistance through such State loan funds;

(C) incentives provided to public water systems that partner with small public water systems to assist with the application process for assistance through such State loan funds;

(D) practices to ensure that amounts in such State loan funds are used to provide loans, loan guarantees, or other authorized assistance in a timely fashion;

(E) practices that support effective management of such State loan funds;

(F) practices and tools to enhance financial management of such State loan funds; and

(G) key financial measures for use in evaluating State loan fund operations, including—

(i) measures of lending capacity, such as current assets and current liabilities or undisbursed loan assistance liability; and

(ii) measures of growth or sustainability, such as return on net interest;

(2) not later than 3 years after the date of enactment of America's Water Infrastructure Act of 2018, disseminate to the States best practices for administration of such State loan funds, based on the information collected pursuant to this subsection; and

(3) periodically update such best practices, as appropriate.

(t) EMERGING CONTAMINANTS.—

(1) IN GENERAL.—Amounts made available under this subsection shall be allotted to a State as if allotted under subsection (a)(1)(D) as a capitalization grant, for deposit into the State loan fund of the State, for the purposes described in subsection (a)(2)(G).

(2) ASSISTANCE TO TERRITORIES.—*Of the amounts made available under this subsection, the Administrator may use*

funds to provide grants to the Virgin Islands, the Commonwealth of the Northern Mariana Islands, American Samoa, and Guam for the purpose of addressing emerging contaminants, with a focus on perfluoroalkyl and polyfluoroalkyl substances.

[(2)] (3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this subsection \$100,000,000 for each of fiscal years 2020 through 2024, to remain available until expended.

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SEC. 1459E. ASSISTANCE FOR COMMUNITY WATER SYSTEMS AFFECTED BY PFAS.

(a) **ESTABLISHMENT.**—*Not later than 180 days after the date of enactment of this section, the Administrator shall establish a program to award grants to affected community water systems to pay for capital costs associated with the implementation of eligible treatment technologies.*

(b) **APPLICATIONS.**—

(1) **GUIDANCE.**—*Not later than 12 months after the date of enactment of this section, the Administrator shall publish guidance describing the form and timing for community water systems to apply for grants under this section.*

(2) **REQUIRED INFORMATION.**—*The Administrator shall require a community water system applying for a grant under this section to submit—*

(A) *information showing the presence of PFAS in water of the community water system; and*

(B) *a certification that the treatment technology in use by the community water system at the time of application is not sufficient to remove all detectable amounts of PFAS.*

(c) **LIST OF ELIGIBLE TREATMENT TECHNOLOGIES.**—*Not later than 150 days after the date of enactment of this section, and every 2 years thereafter, the Administrator shall publish a list of treatment technologies that the Administrator, after providing an opportunity for public comment, determines are effective at removing all detectable amounts of PFAS from drinking water.*

(d) **PRIORITY FOR FUNDING.**—*In awarding grants under this section, the Administrator shall prioritize affected community water systems that—*

(1) *serve a disadvantaged community or a disproportionately exposed community;*

(2) *will provide at least a 10-percent cost share for the cost of implementing an eligible treatment technology; or*

(3) *demonstrate the capacity to maintain the eligible treatment technology to be implemented using the grant.*

(e) **NO INCREASED BONDING AUTHORITY.**—*Amounts awarded to affected community water systems under this section may not be used as a source of payment of, or security for (directly or indirectly), in whole or in part, any obligation the interest on which is exempt from the tax imposed under chapter 1 of the Internal Revenue Code of 1986.*

(f) **AUTHORIZATION OF APPROPRIATIONS.**—

(1) **IN GENERAL.**—*There is authorized to be appropriated to carry out this section not more than—*

- (A) \$125,000,000 for each of fiscal years 2022 and 2023; and
- (B) \$100,000,000 for each of fiscal years 2024 through 2026.

(2) *SPECIAL RULE.*—Of the amounts authorized to be appropriated by paragraph (1), \$25,000,000 are authorized to be appropriated for each of fiscal years 2022 and 2023 for grants under subsection (a) to pay for capital costs associated with the implementation of eligible treatment technologies during the period beginning on October 1, 2014, and ending on the date of enactment of this section.

(g) *DEFINITIONS.*—In this section:

(1) *AFFECTED COMMUNITY WATER SYSTEM.*—The term “affected community water system” means a community water system that is affected by the presence of PFAS in the water in the community water system.

(2) *DISADVANTAGED COMMUNITY.*—The term “disadvantaged community” has the meaning given that term in section 1452.

(3) *DISPROPORTIONATELY EXPOSED COMMUNITY.*—The term “disproportionately exposed community” means a community in which climate change, pollution, or environmental destruction have exacerbated systemic racial, regional, social, environmental, and economic injustices by disproportionately affecting indigenous peoples, communities of color, migrant communities, deindustrialized communities, depopulated rural communities, the poor, low-income workers, women, the elderly, the unhoused, people with disabilities, or youth.

(4) *ELIGIBLE TREATMENT TECHNOLOGY.*—The term “eligible treatment technology” means a treatment technology included on the list published under subsection (c).

(5) *PFAS.*—The term “PFAS” means a perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom, including the chemical GenX.

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SOLID WASTE DISPOSAL ACT

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TITLE II—SOLID WASTE DISPOSAL

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Subtitle C—Hazardous Waste Management

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STANDARDS APPLICABLE TO OWNERS AND OPERATORS OF HAZARDOUS WASTE TREATMENT, STORAGE, AND DISPOSAL FACILITIES

SEC. 3004. (a) *IN GENERAL.*—Not later than eighteen months after the date of enactment of this section, and after opportunity for public hearings and after consultation with appropriate Federal and State agencies, the Administrator shall promulgate regulations establishing such performance standards, applicable to owners and operators of facilities for the treatment, storage, or disposal of haz-

ardous waste identified or listed under this subtitle, as may be necessary to protect human health and the environment. In establishing such standards the Administrator shall, where appropriate, distinguish in such standards between requirements appropriate for new facilities and for facilities in existence on the date of promulgation of such regulations. Such standards shall include, but need not be limited to, requirements respecting—

(1) maintaining records of all hazardous wastes identified or listed under this title which is treated, stored, or disposed of, as the case may be, and the manner in which such wastes were treated, stored, or disposed of;

(2) satisfactory reporting, monitoring, and inspection and compliance with the manifest system referred to in section 3002(5);

(3) treatment, storage, or disposal of all such waste received by the facility pursuant to such operating methods, techniques, and practices as may be satisfactory to the Administrator;

(4) the location, design, and construction of such hazardous waste treatment, disposal, or storage facilities;

(5) contingency plans for effective action to minimize unanticipated damage from any treatment, storage, or disposal of any such hazardous waste;

(6) the maintenance of operation of such facilities and requiring such additional qualifications as to ownership, continuity of operation, training for personnel, and financial responsibility (including financial responsibility for corrective action) as may be necessary or desirable; and

(7) compliance with the requirements of section 3005 respecting permits for treatment, storage, or disposal.

No private entity shall be precluded by reason of criteria established under paragraph (6) from the ownership or operation of facilities providing hazardous waste treatment, storage, or disposal services where such entity can provide assurances of financial responsibility and continuity of operation consistent with the degree and duration of risks associated with the treatment, storage, or disposal of specified hazardous waste.

(b) SALT DOME FORMATIONS, SALT BED FORMATIONS, UNDERGROUND MINES AND CAVES.—(1) Effective on the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any noncontainerized or bulk liquid hazardous waste in any salt dome formation, salt bed formation, underground mine, or cave is prohibited until such time as—

(A) the Administrator has determined, after notice and opportunity for hearings on the record in the affected areas, that such placement is protective of human health and the environment;

(B) the Administrator has promulgated performance and permitting standards for such facilities under this subtitle, and;

(C) a permit has been issued under section 3005(c) for the facility concerned.

(2) Effective on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any hazardous waste other than a hazardous waste referred to in paragraph (1) in a salt dome formation, salt bed formation, underground mine, or cave is

prohibited until such time as a permit has been issued under section 3005(c) for the facility concerned.

(3) No determination made by the Administrator under subsection (d), (e), or (g) of this section regarding any hazardous waste to which such subsection (d), (e), or (g) applies shall affect the prohibition contained in paragraph (1) or (2) of this subsection.

(4) Nothing in this subsection shall apply to the Department of Energy Waste Isolation Pilot Project in New Mexico.

(c) LIQUIDS IN LANDFILLS.—(1) Effective 6 months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of bulk or noncontainerized liquid hazardous waste or free liquids contained in hazardous waste (whether or not absorbents have been added) in any landfill is prohibited. Prior to such date the requirements (as in effect on April 30, 1983) promulgated under this section by the Administrator regarding liquid hazardous waste shall remain in force and effect to the extent such requirements are applicable to the placement of bulk or noncontainerized liquid hazardous waste, or free liquids contained in hazardous waste, in landfills.

(2) Not later than fifteen months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate final regulations which—

(A) minimize the disposal of containerized liquid hazardous waste in landfills, and

(B) minimize the presence of free liquids in containerized hazardous waste to be disposed of in landfills.

Such regulations shall also prohibit the disposal in landfills of liquids that have been absorbed in materials that biodegrade or that release liquids when compressed as might occur during routine landfill operations. Prior to the date on which such final regulations take effect, the requirements (as in effect on April 30, 1983) promulgated under this section by the Administrator shall remain in force and effect to the extent such requirements are applicable to the disposal of containerized liquid hazardous waste, or free liquids contained in hazardous waste, in landfills.

(3) Effective twelve months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the placement of any liquid which is not a hazardous waste in a landfill for which a permit is required under section 3005(c) or which is operating pursuant to interim status granted under section 3005(e) is prohibited unless the owner or operator of such landfill demonstrates to the Administrator, or the Administrator determines, that—

(A) the only reasonably available alternative to the placement in such landfill is placement in a landfill or unlined surface impoundment, whether or not permitted under section 3005(c) or operating pursuant to interim status under section 3005(e), which contains, or may reasonably be anticipated to contain, hazardous waste; and

(B) placement in such owner or operator's landfill will not present a risk of contamination of any underground source of drinking water.

As used in subparagraph (B), the term "underground source of drinking water" has the same meaning as provided in regulations under the Safe Drinking Water Act (title XIV of the Public Health Service Act).

(4) No determination made by the Administrator under subsection (d), (e), or (g) of this section regarding any hazardous waste to which such subsection (d), (e), or (g) applies shall affect the prohibition contained in paragraph (1) of this subsection.

(d) PROHIBITIONS ON LAND DISPOSAL OF SPECIFIED WASTES.—(1) Effective 32 months after the enactment of the Hazardous and Solid Waste Amendments of 1984 (except as provided in subsection (f) with respect to underground injection into deep injection wells), the land disposal of the hazardous wastes referred to in paragraph (2) is prohibited unless the Administrator determines the prohibition on one or more methods of land disposal of such waste is not required in order to protect human health and the environment for as long as the waste remains hazardous, taking into account—

(A) the long-term uncertainties associated with land disposal,

(B) the goal of managing hazardous waste in an appropriate manner in the first instance, and

(C) the persistence, toxicity, mobility, and propensity to bioaccumulate of such hazardous wastes and their hazardous constituents.

For the purposes of this paragraph, a method of land disposal may not be determined to be protective of human health and the environment for a hazardous waste referred to in paragraph (2) (other than a hazardous waste which has complied with the pretreatment regulations promulgated under subsection (m)), unless, upon application by an interested person, it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

(2) Paragraph (1) applies to the following hazardous wastes listed or identified under section 3001:

(A) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1,000 mg/l.

(B) Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals (or elements) or compounds of these metals (or elements) at concentrations greater than or equal to those specified below:

(i) arsenic and/or compounds (as As) 500 mg/l;

(ii) cadmium and/or compounds (as Cd) 100 mg/l;

(iii) chromium (VI and/or compounds (as Cr VI)) 500 mg/

l;

(iv) lead and/or compounds (as Pb) 500 mg/l;

(v) mercury and/or compounds (as Hg) 20 mg/l;

(vi) nickel and/or compounds (as Ni) 134 mg/l;

(vii) selenium and/or compounds (as Se) 100 mg/l; and

(viii) thallium and/or compounds (as Th) 130 mg/l.

(C) Liquid hazardous waste having a pH less than or equal to two (2.0).

(D) Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 50 ppm.

(E) Hazardous wastes containing halogenated organic compounds in total concentration greater than or equal to 1,000 mg/kg.

When necessary to protect human health and the environment, the Administrator shall substitute more stringent concentration levels than the levels specified in subparagraphs (A) through (E).

(3) During the period ending forty-eight months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, this subsection shall not apply to any disposal of contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action required under this subtitle.

(e) SOLVENTS AND DIOXINS.—(1) Effective twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 (except as provided in subsection (f) with respect to underground injection into deep injection wells), the land disposal of the hazardous wastes referred to in paragraph (2) is prohibited unless the Administrator determines the prohibition of one or more methods of land disposal of such waste is not required in order to protect human health and the environment for as long as the waste remains hazardous, taking into account the factors referred to in subparagraph (A) through (C) of subsection (d)(1). For the purposes of this paragraph, a method of land disposal may not be determined to be protective of human health and the environment for a hazardous waste referred to in paragraph (2) (other than a hazardous waste which has complied with the pretreatment regulations promulgated under subsection (m)), unless upon application by an interested person it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

(2) The hazardous wastes to which the prohibition under paragraph (1) applies are as follows—

(A) dioxin-containing hazardous wastes numbered F020, F021, F022, and F023 (as referred to in the proposed rule published by the Administrator in the Federal Register for April 4, 1983), and

(B) those hazardous wastes numbered F001, F002, F003, F004, and F005 in regulations promulgated by the Administrator under section 3001 (40 C.F.R. 261.31 (July 1, 1983)), as those regulations are in effect on July 1, 1983.

(3) During the period ending forty-eight months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, this subsection shall not apply to any disposal of contaminated soil or debris resulting from a response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or a corrective action required under this subtitle.

(f) DISPOSAL INTO DEEP INJECTION WELLS; SPECIFIED SUBSECTION (d) WASTES; SOLVENTS AND DIOXINS.—(1) Not later than forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall complete a review of the disposal of all hazardous wastes referred to in paragraph (2) of subsection (d) and in paragraph (2) of subsection (e) by underground injection into deep injection wells.

(2) Within forty-five months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Adminis-

trator shall make a determination regarding the disposal by underground injection into deep injection wells of the hazardous wastes referred to in paragraph (2) of subsection (d) and the hazardous wastes referred to in paragraph (2) of subsection (e). The Administrator shall promulgate final regulations prohibiting the disposal of such wastes into such wells if it may reasonably be determined that such disposal may not be protective of human health and the environment for as long as the waste remains hazardous, taking into account the factors referred to in subparagraphs (A) through (C) of subsection (d)(1). In promulgating such regulations, the Administrator shall consider each hazardous waste referred to in paragraph (2) of subsection (d) or in paragraph (2) of subsection (e) which is prohibited from disposal into such wells by any State.

(3) If the Administrator fails to make a determination under paragraph (2) for any hazardous waste referred to in paragraph (2) of subsection (d) or in paragraph (2) of subsection (e) within forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, such hazardous waste shall be prohibited from disposal into any deep injection well.

(4) As used in this subsection, the term "deep injection well" means a well used for the underground injection of hazardous waste other than a well to which section 7010(a) applies.

(g) ADDITIONAL LAND DISPOSAL PROHIBITION DETERMINATIONS.—

(1) Not later than twenty-four months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall submit a schedule to Congress for—

(A) reviewing all hazardous wastes listed (as of the date of the enactment of the Hazardous and Solid Waste Amendments of 1984) under section 3001 other than those wastes which are referred to in subsection (d) or (e); and

(B) taking action under paragraph (5) of this subsection with respect to each such hazardous waste.

(2) The Administrator shall base the schedule on a ranking of such listed wastes considering their intrinsic hazard and their volume such that decisions regarding the land disposal of high volume hazardous wastes with high intrinsic hazard shall, to the maximum extent possible, be made by the date forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984. Decisions regarding low volume hazardous wastes with lower intrinsic hazard shall be made by the date sixty-six months after such date of enactment.

(3) The preparation and submission of the schedule under this subsection shall not be subject to the Paperwork Reduction Act of 1980. No hearing on the record shall be required for purposes of preparation or submission of the schedule. The schedule shall not be subject to judicial review.

(4) The schedule under this subsection shall require that the Administrator shall promulgate regulations in accordance with paragraph (5) or make a determination under paragraph (5)—

(A) for at least one-third of all hazardous wastes referred to in paragraph (1) by the date forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984;

(B) for at least two-thirds of all such listed wastes by the date fifty-five months after the date of enactment of such Amendments; and

(C) for all such listed wastes and for all hazardous wastes identified under 3001 by the date sixty-six months after the date of enactment of such Amendments.

In the case of any hazardous waste identified or listed under section 3001 after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall determine whether such waste shall be prohibited from one or more methods of land disposal in accordance with paragraph (5) within six months after the date of such identification or listing.

(5) Not later than the date specified in the schedule published under this subsection, the Administrator shall promulgate final regulations prohibiting one or more methods of land disposal of the hazardous wastes listed on such schedule except for methods of land disposal which the Administrator determines will be protective of human health and the environment for as long as the waste remains hazardous, taking into account the factors referred to in subparagraphs (A) through (C) of subsection (d)(1). For the purposes of this paragraph, a method of land disposal may not be determined to be protective of human health and the environment (except with respect to a hazardous waste which has complied with the pretreatment regulations promulgated under subsection (m)) unless, upon application by an interested person, it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous.

(6)(A) If the Administrator fails (by the date forty-five months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984) to promulgate regulations or make a determination under paragraph (5) for any hazardous waste which is included in the first one-third of the schedule published under this subsection, such hazardous waste may be disposed of in a landfill or surface impoundment only if—

(i) such facility is in compliance with the requirements of subsection (o) which are applicable to new facilities (relating to minimum technological requirements); and

(ii) prior to such disposal, the generator has certified to the Administrator that such generator has investigated the availability of treatment capacity and has determined that the use of such landfill or surface impoundment is the only practical alternative to treatment currently available to the generator.

The prohibition contained in this subparagraph shall continue to apply until the Administrator promulgates regulations or makes a determination under paragraph (5) for the waste concerned.

(B) If the Administrator fails (by the date 55 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984) to promulgate regulations or make a determination under paragraph (5) for any hazardous waste which is included in the first two-thirds of the schedule published under this subsection, such hazardous waste may be disposed of in a landfill or surface impoundment only if—

(i) such facility is in compliance with the requirements of subsection (o) which are applicable to new facilities (relating to minimum technological requirements); and

(ii) prior to such disposal, the generator has certified to the Administrator that such generator has investigated the availability of treatment capacity and has determined that the use of such landfill or surface impoundment is the only practical alternative to treatment currently available to the generator.

The prohibition contained in this subparagraph shall continue to apply until the Administrator promulgates regulations or makes a determination under paragraph (5) for the waste concerned.

(C) If the Administrator fails to promulgate regulations, or make a determination under paragraph (5) for any hazardous waste referred to in paragraph (1) within 66 months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, such hazardous waste shall be prohibited from land disposal.

(7) Solid waste identified as hazardous based solely on one or more characteristics shall not be subject to this subsection, any prohibitions under subsection (d), (e), or (f), or any requirement promulgated under subsection (m) (other than any applicable specific methods of treatment, as provided in paragraph (8)) if the waste—

(A) is treated in a treatment system that subsequently discharges to waters of the United States pursuant to a permit issued under section 402 of the Federal Water Pollution Control Act (commonly known as the “Clean Water Act”) (33 U.S.C. 1342), treated for the purposes of the pretreatment requirements of section 307 of the Clean Water Act (33 U.S.C. 1317), or treated in a zero discharge system that, prior to any permanent land disposal, engages in treatment that is equivalent to treatment required under section 402 of the Clean Water Act (33 U.S.C. 1342) for discharges to waters of the United States, as determined by the Administrator; and

(B) no longer exhibits a hazardous characteristic prior to management in any land-based solid waste management unit.

(8) Solid waste that otherwise qualifies under paragraph (7) shall nevertheless be required to meet any applicable specific methods of treatment specified for such waste by the Administrator under subsection (m), including those specified in the rule promulgated by the Administrator June 1, 1990, prior to management in a land-based unit as part of a treatment system specified in paragraph (7)(A). No solid waste may qualify under paragraph (7) that would generate toxic gases, vapors, or fumes due to the presence of cyanide when exposed to pH conditions between 2.0 and 12.5.

(9) Solid waste identified as hazardous based on one or more characteristics alone shall not be subject to this subsection, any prohibitions under subsection (d), (e), or (f), or any requirement promulgated under subsection (m) if the waste no longer exhibits a hazardous characteristic at the point of injection in any Class I injection well permitted under section 1422 of title XIV of the Public Health Service Act (42 U.S.C. 300h-1).

(10) Not later than five years after the date of enactment of this paragraph, the Administrator shall complete a study of hazardous waste managed pursuant to paragraph (7) or (9) to characterize the risks to human health or the environment associated with such management. In conducting this study, the Administrator shall evaluate the extent to which risks are adequately addressed under existing State or Federal programs and whether unaddressed risks could be better addressed under such laws or programs. Upon receipt of additional information or upon completion of such study and as necessary to protect human health and the environment, the Administrator may impose additional requirements under existing Federal laws, including subsection (m)(1), or rely on other State or Federal programs or authorities to address such risks. In promulgating any treatment standards pursuant to subsection (m)(1) under the previous sentence, the Administrator shall take into account the extent to which treatment is occurring in land-based units as part of a treatment system specified in paragraph (7)(A).

(11) Nothing in paragraph (7) or (9) shall be interpreted or applied to restrict any inspection or enforcement authority under the provisions of this Act.

(h) VARIANCES FROM LAND DISPOSAL PROHIBITIONS.—(1) A prohibition in regulations under subsection (d), (e), (f), or (g) shall be effective immediately upon promulgation.

(2) The Administrator may establish an effective date different from the effective date which would otherwise apply under subsection (d), (e), (f), or (g) with respect to a specific hazardous waste which is subject to a prohibition under subsection (d), (e), (f), or (g) or under regulations under subsection (d), (e), (f), or (g). Any such other effective date shall be established on the basis of the earliest date on which adequate alternative treatment, recovery, or disposal capacity which protects human health and the environment will be available. Any such other effective date shall in no event be later than 2 years after the effective date of the prohibition which would otherwise apply under subsection (d), (e), (f), or (g).

(3) The Administrator, after notice and opportunity for comment and after consultation with appropriate State agencies in all affected States, may on a case-by-case basis grant an extension of the effective date which would otherwise apply under subsection (d), (e), (f), or (g) or under paragraph (2) for up to one year, where the applicant demonstrates that there is a binding contractual commitment to construct or otherwise provide such alternative capacity but due to circumstances beyond the control of such applicant such alternative capacity cannot reasonably be made available by such effective date. Such extension shall be renewable once for no more than one additional year.

(4) Whenever another effective date (hereinafter referred to as a “variance”) is established under paragraph (2), or an extension is granted under paragraph (3), with respect to any hazardous waste, during the period for which such variance or extension is in effect, such hazardous waste may be disposed of in a landfill or surface impoundment only if such facility is in compliance with the requirements of subsection (o).

(i) PUBLICATION OF DETERMINATION.—If the Administrator determines that a method of land disposal will be protective of human health and the environment, he shall promptly publish in the Federal Register notice of such determination, together with an explanation of the basis for such determination.

(j) STORAGE OF HAZARDOUS WASTE PROHIBITED FROM LAND DISPOSAL.—In the case of any hazardous waste which is prohibited from one or more methods of land disposal under this section (or under regulations promulgated by the Administrator under any provision of this section) the storage of such hazardous waste is prohibited unless such storage is solely for the purpose of the accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment or disposal.

(k) DEFINITION OF LAND DISPOSAL.—For the purposes of this section, the term “land disposal”, when used with respect to a specified hazardous waste, shall be deemed to include, but not be limited to, any placement of such hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, or underground mine or cave.

(l) BAN ON DUST SUPPRESSION.—The use of waste or used oil or other material, which is contaminated or mixed with dioxin or any other hazardous waste identified or listed under section 3001 (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment is prohibited.

(m) TREATMENT STANDARDS FOR WASTES SUBJECT TO LAND DISPOSAL PROHIBITION.—(1) Simultaneously with the promulgation of regulations under subsection (d), (e), (f), or (g) prohibiting one or more methods of land disposal of a particular hazardous waste, and as appropriate thereafter, the Administrator shall, after notice and an opportunity for hearings and after consultation with appropriate Federal and State agencies, promulgate regulations specifying those levels or methods of treatment, if any, which substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and the environment are minimized.

(2) If such hazardous waste has been treated to the level or by a method specified in regulations promulgated under this subsection, such waste or residue thereof shall not be subject to any prohibition promulgated under subsection (d), (e), (f), or (g) and may be disposed of in a land disposal facility which meets the requirements of this subtitle. Any regulation promulgated under this subsection for a particular hazardous waste shall become effective on the same date as any applicable prohibition promulgated under subsection (d), (e), (f), or (g).

(n) AIR EMISSIONS.—Not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate such regulations for the monitoring and control of air emissions at hazardous waste treatment, storage, and disposal facilities, including but not limited to open tanks, surface impoundments, and landfills, as may be necessary to protect human health and the environment.

(o) MINIMUM TECHNOLOGICAL REQUIREMENTS.—(1) The regulations under subsection (a) of this section shall be revised from time

to time to take into account improvements in the technology of control and measurement. At a minimum, such regulations shall require, and a permit issued pursuant to section 3005(c) after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require—

(A) for each new landfill or surface impoundment, each new landfill or surface impoundment unit at an existing facility, each replacement of an existing landfill or surface impoundment unit, and each lateral expansion of an existing landfill or surface impoundment unit, for which an application for a final determination regarding issuance of a permit under section 3005(c) is received after the date of enactment of the Hazardous and Solid Waste Amendments of 1984—

(i) the installation of two or more liners and a leachate collection system above (in the case of a landfill) and between such liners; and

(ii) ground water monitoring; and

(B) for each incinerator which receives a permit under section 3005(c) after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the attainment of the minimum destruction and removal efficiency required by regulations in effect on June 24, 1982.

The requirements of this paragraph shall apply with respect to all waste received after the issuance of the permit.

(2) Paragraph (1)(A)(i) shall not apply if the owner or operator demonstrates to the Administrator, and the Administrator finds for such landfill or surface impoundment, that alternative design and operating practices, together with location characteristics, will prevent the migration of any hazardous constituents into the ground water or surface water at least as effectively as such liners and leachate collection systems.

(3) The double-liner requirement set forth in paragraph (1)(A)(i) may be waived by the Administrator for any monofill, if—

(A) such monofill contains only hazardous wastes from foundry furnace emission controls or metal casting molding sand,

(B) such wastes do not contain constituents which would render the wastes hazardous for reasons other than the Extraction Procedure (“EP”) toxicity characteristics set forth in regulations under this subtitle, and

(C) such monofill meets the same requirements as are applicable in the case of a waiver under section 3005(j) (2) or (4).

(4)(A) Not later than thirty months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate standards requiring that new landfill units, surface impoundment units, waste piles, underground tanks and land treatment units for the storage, treatment, or disposal of hazardous waste identified or listed under section 3001 shall be required to utilize approved leak detection systems.

(B) For the purposes of subparagraph (A)—

(i) the term “approved leak detection system” means a system or technology which the Administrator determines to be capable of detecting leaks of hazardous constituents at the earliest practicable time; and

(ii) the term “new units” means units on which construction commences after the date of promulgation of regulations under this paragraph.

(5)(A) The Administrator shall promulgate regulations or issue guidance documents implementing the requirements of paragraph (1)(A) within two years after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984.

(B) Until the effective date of such regulations or guidance documents, the requirement for the installation of two or more liners may be satisfied by the installation of a top liner designed, operated, and constructed of materials to prevent the migration of any constituent into such liner during the period such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated and constructed to prevent the migration of any constituent through such liner during such period. For the purpose of the preceding sentence, a lower liner shall be deemed to satisfy such requirement if it is constructed of at least a 3-foot thick layer of recompacted clay or other natural material with a permeability of no more than 110^{-7} centimeter per second.

(6) Any permit under section 3005 which is issued for a landfill located within the State of Alabama shall require the installation of two or more liners and a leachate collection system above and between such liners, notwithstanding any other provision of this Act.

(7) In addition to the requirements set forth in this subsection, the regulations referred to in paragraph (1) shall specify criteria for the acceptable location of new and existing treatment, storage, or disposal facilities as necessary to protect human health and the environment. Within 18 months after the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall publish guidance criteria identifying areas of vulnerable hydrogeology.

(p) GROUND WATER MONITORING.—The standards under this section concerning ground water monitoring which are applicable to surface impoundments, waste piles, land treatment units, and landfills shall apply to such a facility whether or not—

(1) the facility is located above the seasonal high water table;

(2) two liners and a leachate collection system have been installed at the facility; or

(3) the owner or operator inspects the liner (or liners) which has been installed at the facility.

This subsection shall not be construed to affect other exemptions or waivers from such standards provided in regulations in effect on the date of enactment of the Hazardous and Solid Waste Amendments of 1984 or as may be provided in revisions to those regulations, to the extent consistent with this subsection. The Administrator is authorized on a case-by-case basis to exempt from ground water monitoring requirements under this section (including subsection (o)) any engineered structure which the Administrator finds does not receive or contain liquid waste (nor waste containing free liquids), is designed and operated to exclude liquid from precipitation or other runoff, utilizes multiple leak detection systems within the outer layer of containment, and provides for continuing operation and maintenance of these leak detection systems during the operating period, closure, and the period required for post-closure

monitoring and for which the Administrator concludes on the basis of such findings that there is a reasonable certainty hazardous constituents will not migrate beyond the outer layer of containment prior to the end of the period required for post-closure monitoring.

(q) HAZARDOUS WASTE USED AS FUEL.—(1) Not later than two years after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, and after notice and opportunity for public hearing, the Administrator shall promulgate regulations establishing such—

(A) standards applicable to the owners and operators of facilities which produce a fuel—

(i) from any hazardous waste identified or listed under section 3001, or

(ii) from any hazardous waste identified or listed under section 3001 and any other material;

(B) standards applicable to the owners and operators of facilities which burn, for purposes of energy recovery, any fuel produced as provided in subparagraph (A) or any fuel which otherwise contains any hazardous waste identified or listed under section 3001; and

(C) standards applicable to any person who distributes or markets any fuel which is produced as provided in subparagraph (A) or any fuel which otherwise contains any hazardous waste identified or listed under section 3001;

as may be necessary to protect human health and the environment. Such standards may include any of the requirements set forth in paragraphs (1) through (7) of subsection (a) as may be appropriate. Nothing in this subsection shall be construed to affect or impair the provisions of section 3001(b)(3). For purposes of this subsection, the term “hazardous waste listed under section 3001” includes any commercial chemical product which is listed under section 3001 and which, in lieu of its original intended use, is (i) produced for use as (or as a component of) a fuel, (ii) distributed for use as a fuel, or (iii) burned as a fuel.

(2)(A) This subsection, subsection (r), and subsection (s) shall not apply to petroleum refinery wastes containing oil which are converted into petroleum coke at the same facility at which such wastes were generated, unless the resulting coke product would exceed one or more characteristics by which a substance would be identified as a hazardous waste under section 3001.

(B) The Administrator may exempt from the requirements of this subsection, subsection (r), or subsection (s) facilities which burn de minimis quantities of hazardous waste as fuel, as defined by the Administrator, if the wastes are burned at the same facility at which such wastes are generated; the waste is burned to recover useful energy, as determined by the Administrator on the basis of the design and operating characteristics of the facility and the heating value and other characteristics of the waste; and the waste is burned in a type of device determined by the Administrator to be designed and operated at a destruction and removal efficiency sufficient such that protection of human health and environment is assured.

(C)(i) After the date of the enactment of the Hazardous and Solid Waste Amendments of 1984 and until standards are promulgated and in effect under paragraph (2) of this subsection, no fuel which

contains any hazardous waste may be burned in any cement kiln which is located within the boundaries of any incorporated municipality with a population greater than five hundred thousand (based on the most recent census statistics) unless such kiln fully complies with regulations (as in effect on the date of the enactment of the Hazardous and Solid Waste Amendments of 1984) under this subtitle which are applicable to incinerators.

(ii) Any person who knowingly violates the prohibition contained in clause (i) shall be deemed to have violated section 3008(d)(2).

(r) LABELING.—(1) Notwithstanding any other provision of law, until such time as the Administrator promulgates standards under subsection (q) specifically superceding this requirement, it shall be unlawful for any person who is required to file a notification in accordance with paragraph (1) or (3) of section 3010 to distribute or market any fuel which is produced from any hazardous waste identified or listed under section 3001, or any fuel which otherwise contains any hazardous waste identified or listed under section 3001 if the invoice or the bill of sale fails—

(A) to bear the following statement: “WARNING: THIS FUEL CONTAINS HAZARDOUS WASTES”; and

(B) to list the hazardous wastes contained therein.

Beginning ninety days after the enactment of the Hazardous and Solid Waste Amendments of 1984, such statement shall be located in a conspicuous place on every such invoice or bill of sale and shall appear in conspicuous and legible type in contrast by typography, layouts, or color with other printed matter on the invoice or bill of sale.

(2) Unless the Administrator determines otherwise as may be necessary to protect human health and the environment, this subsection shall not apply to fuels produced from petroleum refining waste containing oil if—

(A) such materials are generated and reinserted onsite into the refining process;

(B) contaminants are removed; and

(C) such refining waste containing oil is converted along with normal process streams into petroleum-derived fuel products at a facility at which crude oil is refined into petroleum products and which is classified as a number SIC 2911 facility under the Office of Management and Budget Standard Industrial Classification Manual.

(3) Unless the Administrator determines otherwise as may be necessary to protect human health and the environment, this subsection shall not apply to fuels produced from oily materials, resulting from normal petroleum refining, production and transportation practices, if (A) contaminants are removed; and (B) such oily materials are converted along with normal process streams into petroleum-derived fuel products at a facility at which crude oil is refined into petroleum products and which is classified as a number SIC 2911 facility under the Office of Management and Budget Standard Industrial Classification Manual.

(s) RECORDKEEPING.—Not later than fifteen months after the date of enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall promulgate regulations requiring that any person who is required to file a notification in accordance with subparagraph (1), (2), or (3), of section 3010(a) shall maintain

such records regarding fuel blending, distribution, or use as may be necessary to protect human health and the environment.

(t) FINANCIAL RESPONSIBILITY PROVISIONS.—(1) Financial responsibility required by subsection (a) of this section may be established in accordance with regulations promulgated by the Administrator by any one, or any combination, of the following: insurance, guarantee, surety bond, letter of credit, or qualification as a self-insurer. In promulgating requirements under this section, the Administrator is authorized to specify policy or other contractual terms, conditions, or defenses which are necessary or are unacceptable in establishing such evidence of financial responsibility in order to effectuate the purposes of this Act.

(2) In any case where the owner or operator is in bankruptcy, reorganization, or arrangement pursuant to the Federal Bankruptcy Code or where (with reasonable diligence) jurisdiction in any State court or any Federal Court cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial responsibility must be provided under this section may be asserted directly against the guarantor providing such evidence of financial responsibility. In the case of any action pursuant to this subsection, such guarantor shall be entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

(3) The total liability of any guarantor shall be limited to the aggregate amount which the guarantor has provided as evidence of financial responsibility to the owner or operator under this Act. Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or other applicable law.

(4) For the purpose of this subsection, the term “guarantor” means any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this section.

(u) CONTINUING RELEASES AT PERMITTED FACILITIES.—Standards promulgated under this section shall require, and a permit issued after the date of enactment of the Hazardous and Solid Waste Amendments of 1984 by the Administrator or a State shall require, corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage, or disposal facility seeking a permit under this subtitle, regardless of the time at which waste was placed in such unit. Permits issued under section 3005 shall contain schedules of compliance for such corrective action (where such corrective action cannot be completed prior to issuance of the permit) and assurances of financial responsibility for completing such corrective action.

(v) CORRECTIVE ACTIONS BEYOND FACILITY BOUNDARY.—As promptly as practicable after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, the Administrator shall amend the standards under this section regarding corrective action required at facilities for the treatment, storage, or disposal, of hazardous waste listed or identified under section 3001 to require that corrective action be taken beyond the facility boundary where necessary to protect human health and the environment unless the owner or operator of the facility concerned demonstrates to the satisfaction of the Administrator that, despite the owner or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. Such regulations shall take effect immediately upon promulgation, notwithstanding section 3010(b), and shall apply to—

- (1) all facilities operating under permits issued under subsection (c), and
- (2) all landfills, surface impoundments, and waste pile units (including any new units, replacements of existing units, or lateral expansions of existing units) which receive hazardous waste after July 26, 1982.

Pending promulgation of such regulations, the Administrator shall issue corrective action orders for facilities referred to in paragraphs (1) and (2), on a case-by-case basis, consistent with the purposes of this subsection.

(w) UNDERGROUND TANKS.—Not later than March 1, 1985, the Administrator shall promulgate final permitting standards under this section for underground tanks that cannot be entered for inspection. Within forty-eight months after the date of the enactment of the Hazardous and Solid Waste Amendments of 1984, such standards shall be modified, if necessary, to cover at a minimum all requirements and standards described in section 9003.

(x) If (1) solid waste from the extraction, beneficiation or processing of ores and minerals, including phosphate rock and overburden from the mining of uranium, (2) fly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels, or (3) cement kiln dust waste, is subject to regulation under this subtitle, the Administrator is authorized to modify the requirements of subsections (c), (d), (e), (f), (g), (o), and (u) and section 3005(j), in the case of landfills or surface impoundments receiving such solid waste, to take into account the special characteristics of such wastes, the practical difficulties associated with implementation of such requirements, and site-specific characteristics, including but not limited to the climate, geology, hydrology and soil chemistry at the site, so long as such modified requirements assure protection of human health and the environment.

(y) MUNITIONS.—(1) Not later than 6 months after the date of the enactment of the Federal Facility Compliance Act of 1992, the Administrator shall propose, after consulting with the Secretary of Defense and appropriate State officials, regulations identifying when military munitions become hazardous waste for purposes of this subtitle and providing for the safe transportation and storage of such waste. Not later than 24 months after such date, and after notice and opportunity for comment, the Administrator shall pro-

mulgate such regulations. Any such regulations shall assure protection of human health and the environment.

(2) For purposes of this subsection, the term “military munitions” includes chemical and conventional munitions.

(2) *PFAS WASTES.*—

(1) *FIREFIGHTING FOAM.*—*Not later than 6 months after the date of enactment of this subsection, the Administrator shall promulgate regulations requiring that when materials containing perfluoroalkyl and polyfluoroalkyl substances or aqueous film forming foam are disposed—*

(A) *all incineration is conducted in a manner that eliminates perfluoroalkyl and polyfluoroalkyl substances while also minimizing perfluoroalkyl and polyfluoroalkyl substances emitted into the air to the extent feasible;*

(B) *all incineration is conducted in accordance with the requirements of the Clean Air Act, including controlling hydrogen fluoride;*

(C) *any materials containing perfluoroalkyl and polyfluoroalkyl substances that are designated for disposal are stored in accordance with the requirement under part 264 of title 40, Code of Federal Regulations; and*

(D) *all incineration is conducted at a facility that has been permitted to receive waste regulated under this subtitle.*

(2) *PENALTIES.*—*For purposes of section 3008(d), a waste subject to a prohibition under this subsection shall be considered a hazardous waste identified or listed under this subtitle.*

* * * * *

XVII. DISSENTING VIEWS

I cannot support H.R. 2467, the “PFAS Action Act.” I do not make this choice lightly. I know contamination from per- and polyfluoroalkyl substances (PFAS) is a serious problem in many congressional districts. I want PFAS contamination and associated pollution addressed. This bill’s approach, though—just like the version in the 116th Congress—is the wrong response to it.

This approach is ill-advised for three reasons. First, the status quo on PFAS has changed considerably since this Committee favorably reported H.R. 535, the “PFAS Action Act” in November 2019. The manifold statutory enactments, research activities, and EPA efforts to develop new PFAS regulations all demonstrate that regardless of enactment of the PFAS Action Act, efforts to understand PFAS and combat PFAS risks have been, are, and will continue to happen.

Second, H.R. 2467 contains provisions that consistently diminish any emphasis on high quality, scientific reviews or notice and public comment procedures for many EPA regulatory actions. It also creates new programs that EPA may not be equipped to implement, and massive workload mandates that will leave little space for EPA to do anything else.

Third, this bill, while politically appealing, still maintains most of the significant deficits it previously carried. This bill’s favorable reporting to the House ignores many legal and practical realities, as well as the enormous impacts these policy choices (which are a de facto ban of all PFAS) will have for the U.S. economy and our standard of living.

THE PFAS BASELINE AND H.R. 2467

Any discussion of PFAS must begin by acknowledging both what it is and is not. While some mistake PFAS to either be just a handful of problematic substances, like perfluorooctanoic acid (PFOA), perfluorooctane sulfonate (PFOS), and GenX chemicals, or a family of like chemicals; PFAS are, instead, an enormous, diverse class of man-made chemicals. EPA’s “PFAS Master List of PFAS Substances (Version 2)” contains 9,252 distinct chemicals ascribed to this class.¹

With that established, the scope of H.R. 2467 becomes easier to understand. Since its definition of PFAS includes any “perfluoroalkyl or polyfluoroalkyl substance with at least one fully fluorinated carbon atom”, each requirement or action imposed by this bill applies to 9,252 chemicals and their uses.

Importantly, too, is that even though EPA has been aggressively working to understand scientifically this enormous class of chemicals and its individual members, EPA still lacks a strong under-

¹ CompTox Chemicals Dashboard | PFASMASTER Chemicals (epa.gov)

standing in many areas. EPA has examined only the toxicity (human health impacts) of just a few PFAS and lacks exposure to data necessary to determine the existence of certain risks.² On top of that, the EPA has limited, validated, and sanctioned PFAS detection and testing methods.

THE PFAS ACTION ACT FAILS TO ACCOUNT FOR PROGRESS ALREADY MADE

The PFAS Action Act appears to come from the premise that nothing is being done to look at PFAS and that, absent congressional mandates, EPA cannot act to address PFAS risks. It requires aggressive, far reaching actions be undertaken by several media offices within EPA, and it deploys authorities under each of EPA's major statutes. Yet, the reality of this matter does not support the premise on which this bill is built.

For instance, over the last two years, 31 new statutory provisions became law. These measures banned certain uses of PFAS chemicals in products, required greater Federal collaboration on PFAS research, compelled PFAS cleanup at military installations, pushed collaborative agreements for cleanups that addressed State compliance concerns, and authorized funding for removing known PFAS from drinking water.

Moreover, since November 2020, the U.S. Environmental Protection Agency (EPA) has taken nine administrative actions to advance major regulatory efforts for PFOA, PFOS, and some other PFAS. EPA Administrator Regan has also commissioned a multi-year internal review process at EPA to review all PFAS Action Plan work, propose any necessary modifications, and identify new strategies and priorities related to PFAS.³

In addition, it's not just the size, complexity, or appropriateness of these mandates that give pause, it's that the mandates in H.R. 2467 either interrupt existing EPA activity or place unrealistic burdens on EPA's ability to handle the PFAS work it is performing. This concern includes EPA's months-long work on drinking water standards for PFOA and PFOS as well as congressionally mandated efforts to collect and process information on 1,000 PFAS chemicals. These policy choices place EPA in the precarious position of choosing between complying with the law or doing a credible job.

THE PFAS ACTION ACT GOES TOO FAR

The PFAS Action Act substitutes Congress's political judgment for that of Agency professionals relying on an evidence based, science informed, and risk driven framework. Sections 2, 5, and 8 mandate that EPA stop undertaking scientific and legal due diligence and instead hurry up and issue regulations within a short time frame; sacrificing a reasoned and appropriate standard for speeding final regulations for PFOA and PFOS as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) "hazardous substance," a Safe Drinking Water Act

²Research on Per- and Polyfluoroalkyl Substances (PFAS) | Safer Chemicals Research | US EPA

³https://www.epa.gov/sites/production/files/2021-04/documents/per-and-polyfluoroalkyl-substances.memo._signed.pdf

(SDWA) drinking water “contaminant,” and a Clean Air Act (CAA) “hazardous air pollutant.”

In like manner, this legislation displays a complete lack of confidence in EPA officials; removing statutorily imposed review of science and risks and ignoring that new chemistries are often designed to replace older and potentially more toxic chemistries. Section 4 doesn’t just ban commercialization of any new PFAS or new use of a PFAS for 5 years, without any of the mandated and rigorous scientific review required under section 5 of the Toxic Substances Control Act (TSCA), it places the harshest predetermination of unreasonable risk for an entire class of chemicals. In other words, once the 5-year ban is over, any manufacturer will face the higher burden to both EPA and the marketplace of needing to prove a negative to successfully commercialize their product.

H.R. 2467 also surreptitiously extinguishes notice and public comment on the PFOA and PFOS regulations it requires. As structured, the mandates for final regulations in sections 2, 5, and 8 leave EPA so little time for process, including meeting with its with its science advisory boards, that something “has-to-give.” Under the Administrative Procedures Act, federal agencies may issue interim final rules “when an agency for good cause finds that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest” without first publishing a proposed rule.⁴ These interim final rules will make any public comment, if taken, an afterthought.

In addition, the PFAS Action places an unrealistic regulatory review burden on EPA that will overwhelm its program and research resources—and is likely to result in litigation. H.R. 2467 requires EPA to review and make regulatory determinations on more than 9,250 PFAS chemicals within 5 years under CERCLA (section 2) and the CAA (section 8)—and to a lesser extent under SDWA (section 5). Practically speaking, notwithstanding that it has taken EPA two decades to position itself to regulate a few PFAS chemicals, this legislation calls for EPA to increase its output on just PFAS by more than 5600 percent—EPA currently lists 165 PFAS chemicals it has selected for research.⁵ Even if EPA could meet this deadline, doing so would relegate more important public health and environmental concerns to the sideline.

Furthermore, section 3 requires simultaneous comprehensive toxicity testing on all 9,252 PFAS, including ones that EPA is already being forced to regulate, by any person who manufactures or processes PFAS. This mandate disregards the value of the information Congress has also already obligated manufacturers to produce and EPA to collect under section 8 of the Toxic Substances Control Act. Plus, section 3 may not provide much utility for the regulatory review edicts in H.R. 2467. Importantly, it will overrun existing domestic laboratory capacity and destroy scientists’ ability to work on the highest science priorities, whether in carbon-free energy sources or pandemic prevention and control.

The PFAS Action Act also requires EPA to create a program where EPA does not have the infrastructure or in-house expertise

⁴ Section 553(b)(3)(B) of title 5, U.S. Code

⁵ CompTox Chemicals Dashboard | EPAPFASRESEARCH Chemicals

to manage it. Section 10 of H.R. 2467 establishes a PFAS-Free label program for consumer products in the Safer Choice Program, a program never designed for articles such as pots, pans, or other cooking utensils. Revamping this program would require both a major expansion of this small program as well as significant changes that would well-exceed the 1-year deadline the bill demands. Most importantly, this program will instill a false sense of security for consumers since the absence of PFAS may not necessarily equal a safer product.

Last, but not to be overlooked, section 9 of H.R. 2467 uses an unattainable standard to ban incineration of any PFAS-containing material and requires any persons disposing of these materials to store them as if they are hazardous waste—potentially undoing a workable standard created in section 330 of the National Defense Authorization Act for Fiscal Year 2020. Significantly, since section 9 has no carve outs of any kind, it covertly has the effect of federalizing local trash collection, creating major new obligations for municipal solid waste, overwhelming existing landfill capacity, and creating compliance confusion. One perverse consequence of section 9 is it will place enormous pressures on charitable groups and thrift stores that receive discarded winter coats and weatherized garments—which will now need to be treated as hazardous waste.

THE PFAS ACTION ACT—WHAT IT ALL MEANS

The increased national coverage and discussion of widespread environmental contamination from certain PFAS at specific types of locations and concentrated in certain states has raised both interest and anxiety about PFAS.

The Majority either does not know or care about the Leviathan this bill creates. No chemical class is perfect, but in a class this large and diverse, we must acknowledge that certain policy objectives and standard of living issues depend on accepting some level of risk. PFAS are used in medical devices and drugs approved by the Federal Food and Drug Administration, aircraft parts, semiconductors, clean energy technology, and protective gear for military and police.

I joined Republican members in seeking reasonable relief to safeguard these essential uses, but these efforts were rebuffed by the Majority claiming responsible users of PFAS have nothing of which to be concerned. The Majority's argument, though, misses the point entirely when it comes to just one part of H.R. 2467: "causation" is not a factor in a CERCLA liability analysis. Neither is "recklessness" or "negligence." Someone is liable under CERCLA section 107 just by virtue of being an owner, operator, transporter, or arranger/generator. Period. There is no defense that the party did not "cause the pollution."

This is just one example.

The massive, simultaneously occurring, and uncompromisingly aggressive mandates in H.R. 2467 dispense with decades of science, risk, and administrative review and practice to hustle through results with only the patina of government action to instill public confidence. It is an unmistakable conclusion for any reasonable person reading this bill that, when faced with the collective line up

of proposals contained in H.R. 2467, Congress intended to create a de facto ban on 9,252 chemicals.

Why?

As mentioned above, H.R. 2467 will profile all PFAS, blackball the creation of newer, safer PFAS, limit disposal options for materials containing PFAS, mandate that materials with PFAS be treated like hazardous waste, and bring permanent, environmental liability into play if you have any attachment to PFAS. All this while overwhelming EPA's existing resources and ability to tackle environmental and public health challenges beyond PFAS.

In short, it will stunt American innovation; reduce our health preparedness, economic competitiveness, and standard of living; and help us to lose our children's future.

I want solutions to PFAS issues, but I want us to proceed based upon science, not fear; understanding, not assumptions; thoughtful public input, not hidden, top-down decisions; and actions appropriate to the risks posed, not to the exclusion of them.

For the above reasons, I must respectfully oppose this bill's approach.

CATHY MCMORRIS RODGERS,
*Republican Leader, House
Energy and Commerce
Committee.*

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