

TESTIMONY OF THE NEW YORK PUBLIC INTEREST RESEARCH GROUP BEFORE THE JOINT HEARING OF THE SENATE FINANCE AND ASSEMBLY WAYS & MEANS COMMITTEES REGARDING THE FISCAL YEAR 2021-22 ENVIRONMENTAL AND ENERGY BUDGET PROPOSALS January 27, 2021 Albany, N.Y.

Good afternoon. My name is Liz Moran, and I am the Environmental Policy Director for the New York Public Interest Research Group (NYPIRG). NYPIRG is a non-partisan, not-for-profit research and advocacy organization. Consumer protection, environmental preservation, public health, healthcare quality, higher education affordability, and governmental reforms are our principal areas of concern. We appreciate the opportunity to testify on the governor's executive budget proposals for the environment and energy.

Governor Cuomo's SFY 2021-2022 Executive Budget Proposal includes several important funding initiatives, including:

- Increasing the Clean Water Infrastructure Act by \$500 million;
- Extending brownfield tax credits;
- Prohibiting utility shutoffs during state of emergencies; and,
- Maintaining the Environmental Protection Fund with \$300 million.

However, there are a few proposals that are cause for concern. Additionally, for New York to be on the right track to both generate revenue and ensure New Yorkers have the strongest environmental and public health protections, the final budget should:

- End nonessential subsidies to the fossil fuel industry;
- Generate revenue for the transition off fossil fuels by instituting polluter penalties, like the Climate and Community Investment Act;
- Ensure New York's plastic bag ban bans as many plastic bags as possible;
- Require testing of private water wells before the sale or transfer of property, and address emerging contaminants in all public water supplies; and,
- Expand New York's Bottle Deposit Law to include non-carbonated beverages, wine, liquor, and cider.

The remainder of our testimony is organized by topic to provide detailed reactions to what is in the executive budget, as well as those which were left out.

End Nonessential Fossil Fuel Subsidies

As the climate emergency, COVID-19 pandemic, and subsequent financial crisis escalate, New York cannot afford to continue subsidizing the fossil fuel industry with hundreds of millions of dollars annually. Reviewing and eliminating nonessential (those that would not harm consumers) fossil fuel subsidies is critical to both addressing the state's budget shortfall and combating the climate crisis.

These subsidies not only prop up an industry that actively damages New York's environment but also leave less money for programs that help New Yorkers. Additionally, New York's crucial Climate Leadership and Community Protection Act established into law a goal to achieve net-zero greenhouse gas emissions by 2050 and 100% decarbonized power by 2040. Continuing to subsidize fossil fuels would prevent New York from meeting these goals.

According to the FY2020 Annual Report on New York State Tax Expenditures,¹ the state provides \$1.6 billion in subsidies to the fossil fuel industry. Unless those subsidies can be proven to directly benefit consumers, they should be eliminated. Subsidies that help New Yorker's heat their homes or drive their cars should be phased out after consumers can easily switch off of fossil fuels.

Hold the Fossil Fuel Industry Accountable through a Polluter Penalty

The last four years have been the hottest in recorded history,² and a warming planet has dire consequences. Burning fossil fuels is a leading contributor to climate change, and the oil and gas industry has known this for decades. Yet, numerous media reports have documented that the industry chose not to alert the world to these dangers and curb fossil fuel extraction. Instead, industry used hot-wired lobbyists and campaign contributions to bamboozle the public and undermine action.³

New York's environmental funding needs are enormous. It has been estimated that the state will need to invest at least \$4 to \$5.5 billion annually to ensure the state moves off of fossil fuels and provides a just transition to displaced workers.⁴ Additionally, investments will need to be made to

https://www.scientificamerican.com/article/dark-money-funds-climate-change-denial-effort/.

¹ NYS Division of Budget, "FY 2020 Annual report on New York State Tax Expenditures," <u>https://www.budget.ny.gov/pubs/archive/fy20/exec/ter/fy20ter.pdf</u>.

² National Aeronautics and Space Administration, Jan. 18, 2018, NASA, NOAA, 2017 Long Term Warming Trend Continued in 2017, https://www.nasa.gov/press-release/long-term-warming-trend-continued-in-2017-nasa-noaa, Accessed December 11, 2018.

³ Barrett, P & Philips, M., "Can ExxonMobil Be Found Liable for Misleading the Public on Climate Change?" September 7, 2016, Bloomberg Businessweek, see: <u>https://www.bloomberg.com/news/articles/2016-09-07/will-exxonmobil-have-to-pay-for-misleading-the-public-on-climate-change</u>; Fischer, D., ""Dark Money" Funds Climate Change Denial Effort," Scientific American, December 23, 2013, see:

⁴ Pollin, R., Garrett-Peltier, H., & Wicks-Lim, J., "Clean Energy Investments for New York State: An Economic Framework for Promoting Climate Stabilization and Expanding Good Job Opportunities," Department of Economics and Political Economy Research Institute (PERI) University of Massachusetts-Amherst, November 2017, Page 3, https://www.peri.umass.edu/publication/item/1026-clean-energy-investments-for-new-york-state-an-economic-framework-for-promoting-climate-stabilization-and-expanding-good-job-opportunities

protect water quality, restore wetlands and other lands damaged by the climate crisis, and to increase community resilience to the changing climate.

While the state has lost many lives and is facing a steep fiscal cliff due to the COVID-19 pandemic, the coronavirus crisis has only highlighted the importance of holding polluters accountable and investing in environmental initiatives that protect public health. The impacts of the crisis have been made worse by environmental pollution. As one example, a study from Harvard found significantly higher death rates among COVID-19 patients who had been exposed to high levels of air pollution.⁵

It is critical for the state to step up where the federal government has dropped off the map—holding polluters financially responsible for the damage they've caused. The costs of remedying the climate crisis cannot fall upon the shoulders of everyday New Yorkers.

New York has a strong history of holding polluters accountable for the pollution they created, namely through the 1986 Environmental Bond Act, which, combined with the state's Superfund program, helped put polluters on the hook for the costs of toxic waste cleanups.

There is broad support amongst the public for the "polluter pays" principle. Recent national polling, conducted by the Center for Climate Integrity, found that 70 percent of Americans support the concept of holding climate polluters financially responsible for efforts to fight climate change, with that number jumping to 82 percent after respondents were informed of the decades of deception perpetuated by the fossil fuel industry.

There are a number of ways the fossil fuel industry could be held accountable for their damage, including ending fossil fuel subsidies, or creating a polluter penalty via legislation like the Climate and Community Investment Act.

Support funding for the Clean Water Infrastructure Act

The governor included in his 2019 State of the State a commitment to an additional \$2.5 billion on top of the existing \$2.5 billion for the Clean Water Infrastructure Act ("the Act").⁶ Keeping to this promise, the governor's executive budget proposal includes a third installment of \$500 million for the Act. While far more funding will be needed to keep pace with growing needs and demand, the Governor and the Legislature must maintain the \$500 million annual commitment to the Clean Water Infrastructure Act.

⁵ "Air pollution linked with higher COVID-19 death rates," Harvard T.H. Chan School of Public Health, May 5, 2020, <u>https://www.hsph.harvard.edu/news/hsph-in-the-news/air-pollution-linked-with-higher-covid-19-death-rates/</u> ⁶ New York State Governor Andrew Cuomo, 2019 State of the State Address,

https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/2019StateoftheStateBook.pdf, p. 336

It has been estimated that over the next twenty years, New York will need to invest approximately \$80 billion to make needed updates, repairs, and replacements for wastewater and drinking water infrastructure.⁷ These estimates are now over ten-years old and have likely increased since then.⁸

That figure doesn't include other water needs that are encompassed in the Clean Water Infrastructure Act, like funding to preserve land around source water, septic system replacement, and water filtration systems. For example, according to the Department of Health (DOH), costs for treating emerging contaminants statewide can cost as much as \$1.5 billion for PFOA and PFOS, and \$1.1 billion for 1,4-dioxane, should a polluter not be identified and made to pay.

Additionally, the FY2017–2018 state budget included \$20 million for the replacement of lead drinking water service lines. Replacing lead service lines is an important undertaking that will need increased funding to ensure all lead service lines are identified and replaced. The \$20 million allocated in the budget covers the expected estimated cost of replacing about 8,000 lines,⁹ or about half the number of lead service connections in Syracuse alone.¹⁰

The cost to public health if these investments are not made is enormous, which is why it is critical for New York to put funding on pace to catch up with outstanding needs.

Require private well testing

The governor's proposed budget for SFY 2017-18 contained a proposal for private well testing. Unfortunately, that legislation did not make it into the final budget for that year.

While public water supplies are regularly tested for contaminants, and the results are sent to each ratepayer and made publicly available, private groundwater wells are not held to the same standards. As a result, homebuyers have no assurances of water quality, and the public does not get the full picture of local water quality issues.

The 2016 water quality hearings promised New Yorkers that this key component to protecting drinking water would finally be addressed. The public has the right to know what's in their waterand requiring well testing before the sale of a home is a simple step New York should take this year.

Test and regulate emerging contaminants

⁷ Hamilton, Matthew, "New York's water infrastructure needs estimated at \$80B over 20 years," Times Union, February 13, 2017, <u>https://www.timesunion.com/local/article/New-York-s-water-infrastructure-needs-estimated-10930256.php</u>

⁸ DEC Commissioner Joseph Martens, 2-14-2015: <u>https://www.youtube.com/watch?v=IDNm9wfFsUc</u>

⁹ Fears, D. and Dennis, B., "One city's solution to drinking water contamination? Get rid of every lead pipe," *Washington Post*, May 10, 2016. <u>https://www.washingtonpost.com/national/health-science/one-citys-solution-to-drinking-water-contamination-get-rid-of-every-lead-pipe/2016/05/10/480cd842-0814-11e6-bdcb-0133da18418d_story.html?utm_term=.9baa67f857d0</u>

¹⁰ Mulder, J., "Syracuse's 15,000 lead pipes pose risk to drinking water," *Syracuse.com*, March 20, 2016. http://www.syracuse.com/health/index.ssf/2016/03/syracuses 15000 lead pipes pose risk to drinking water.html

Following joint legislative hearings on water quality in September 2016, in the SFY 2017-18 budget, two critical pieces of legislation were passed to address emerging contaminants in New York. One piece of legislation created New York's Drinking Water Quality Council (DWQC), a body tasked with producing recommendations for regulating emerging contaminants.¹¹ The second piece creates New York's Emerging Contaminant Monitoring Act, which directs the Department of Health to create a list of unregulated emerging contaminants to be tested in drinking water statewide.¹²

Unfortunately, nearly four years later, DOH has yet to implement the Emerging Contaminant Monitoring Act, which means there are still hundreds of communities that don't know the full extent of what is in their water. The Department must promulgate an emerging contaminant list as soon as possible and begin immediate testing – they can easily start with the federal emerging contaminant list, UCMR 3.¹³

Emerging contaminants are unregulated contaminants that EPA believes may have negative health consequences and are suspected to be in drinking water supplies. Through a recent analysis of EPA data, NYPIRG found that **176 water systems, impacting 16 million New Yorkers, detected one or more emerging contaminants**.¹⁴ Every region in New York State has been impacted.

However, this is with limited data. Approximately 2,075 water systems, serving 2.4 million New Yorkers, have not had any emerging contaminant testing under the most recent federal emerging contaminant testing list.

This loophole is not news to New York. In 2015, it became public knowledge that the small community in upstate New York, Hoosick Falls, had unsafe levels of the chemical PFOA (perfluorooctanoic acid), exposure to which has been linked to developmental effects to fetuses, thyroid disorders, ulcerative colitis, high-cholesterol, preeclampsia, and kidney and testicular cancer.¹⁵

Hoosick Falls has a population of approximately 3,500 residents – so it wasn't because of EPA or New York State required testing that Hoosick Falls discovered this chemical, but because of the initiative of a private citizen.

Additionally, since this law was first passed, new PFAS contaminants of concern have shown up in drinking water supplies. In Mayville, a small community in Chautauqua County, high levels of PFNA were detected in the drinking water.¹⁶ PFNA was a chemical on EPA's third emerging

¹⁵ Judith Schreiber, "PFOA Exposure and Health Risk Synopsis," February 26, 2018,

¹¹ New York State Public Health Law § 1113

¹² New York State Public Health Law § 1112

¹³ EPA, Third Unregulated Contaminant Monitoring Rule, <u>https://www.epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule</u>

¹⁴ Elizabeth Moran, "What's in My Water?", NYPIRG, May, 2019,

https://nypirg.org/pubs/201905/Whats_in_my_water_2019.pdf

https://www.nrdc.org/sites/default/files/pfoa-exposure-health-risk-analysis-20180226.pdf.

¹⁶ Anne Neville, "Chemical causing Mayville water ban was found in wells in 2019," Buffalo News, December 13, 2020, <u>https://buffalonews.com/news/chemical-causing-mayville-water-ban-was-found-in-wells-in-</u>2019/article_5d968346-3d59-11eb-8c72-9bf74ff54e52.html

contaminant list, but because of the size of Mayville, they did not have to test for this chemical during testing from the 2013-2015 period. PFNA is very similar to PFOA and PFOS. Levels as high as 330 parts per trillion were detected in their water.¹⁷

Mayville is experiencing the same story that Hoosick Falls went through. *This legislation must be enacted to prevent this story from continuing to repeat.*

The longer New York goes without statewide emerging contaminant testing, the longer residents remain in the dark about the quality of their water, and the greater the chances residents get exposed to unsafe levels of contaminants. Without this testing, New York is on a path to repeat what happened in Hoosick Falls. This legislation is critical to prevent such an outcome.

This session, the Legislature should pass S.1759 (Skoufis)/A.126 (Gottfried). This legislation amends the section 1112 of the public health law to add additional chemicals and contaminants to the list of emerging contaminants. The legislation also directs the Department of Health Commissioner to promulgate the emerging contaminant list 30 days after enactment of the legislation.

The emerging contaminants listed in this legislation are those that have already shown up in larger systems in New York State. On pages 11 and 12, NYPIRG has attached tables from our analysis that show which emerging contaminants have already been detected in drinking water supplies in New York. The legislation also includes every PFAS chemical that can currently be detected through EPA approved and available testing methods.

Passing this legislation will be critical to ensure New Yorkers are protected from new emerging contaminants.

Ensure New York's Plastic Bag Ban is as Strong as Possible

The Governor's proposed budget includes legislation in the Article VII TED bill that significantly revises New York's Plastic Bag Ban. It is crucial to ensure the law is as strong as possible and bans as many plastic bags as possible; however, these changes may jeopardize the strength of the law.

Recently, following a lawsuit against New York's plastic bag ban, the judge ruled that all plastic bags are banned in New York. Additionally, the judge ruled that New York's Department of Environmental Conservation made the rules to follow the law so confusing, that they would need to pay the fees to the plaintiffs. This is unprecedented and means New York cannot make this law unnecessarily confusing.

The intent of some of the changes appears to be to allow more kinds of reusable bags, including those that may look like fabric, but are actually plastic. Given the role that plastic production plays

¹⁷ "State and County Health Departments Issue "DO NOT DRINK" Water Advisory for Village of Mayville Water Customers," Chautauqua County, December 10, 2020, <u>https://chqgov.com/public-health/news/state-and-county-health-departments-issue-do-not-drink-water-advisory-village</u>

in contributing to the global climate crisis, New York must strongly evaluate if these bags *should* be considered reusable.

Additionally, the legislation adds a new definition for "film plastic." NYPIRG urges the Governor and the Legislature to make sure it is clear thicker plastic bags, like those currently being given out illegally by many stores and marketed as reusable, are clearly banned.

If this law is to be amended, it should be strengthened to include:

- 1. A ban on plastic bags for food takeout and delivery; and,
- 2. A statewide fee on paper bags.

Expand New York's Bottle Deposit Law

Expanding New York's Bottle Deposit Law, commonly known as "the Bottle Bill," is a key solution to New York's, and the country's, current recycling crisis. China, which had been accepting massive amounts of plastic waste, stopped accepting plastic waste imports in January 2018.¹⁸ This has caused global shockwaves and significant strains on municipal recycling programs in the U.S. NYPIRG recommends the following for an expansion of the Bottle Bill:

- 1. Add a deposit fee to most beverage containers, including: wine, liquor, cider, sports drinks, juices, coffee beverages, iced tea, and other non-carbonated beverages. More containers with deposits will incentivize consumers to recycle these containers, making them less likely to be littered or take up rapidly disappearing landfill space.
- 2. Increase the deposit from 5-cents to 10-cents. States with higher deposit fees have higher redemption rates than states with a five (5φ) cent fee. In Michigan the deposit fee is ten (10φ) cents, and the redemption rate in 2016 was 92.2%. Vermont has a fifteen (15φ) cent fee on liquor bottles and the redemption rate for liquor containers in 2017 was 84%. The data shows that increasing the deposit fee increases the incentive for recycling. A ten (10φ) cent deposit fee would ensure that even more beverage containers get recycled in New York State.
- 3. Increase the percent requirement for recycled content in new plastic and glass beverage containers. This will strengthen the market for recycled content.
- 4. A portion of the unclaimed deposits should be given to maintain municipal recycling programs.

Enacted in 1982, the New York State Returnable Container Act, commonly known as the Bottle Bill, requires a 5-cent refundable deposit to be placed on eligible beverage containers. The program originally covered beer and soda sold in New York and was later expanded to include wine coolers. The law requires retailers who sell covered beverages to accept any empty containers back of products that they sell and refund the deposits. The law also requires beverage distributors to compensate retailers for the cost of collecting and recycling empty containers by paying them a

¹⁸ Watson, Sara, "China Has Refused To Recycle The West's Plastics. What Now?," *NPR*, June 28, 2018, <u>https://www.npr.org/sections/goatsandsoda/2018/06/28/623972937/china-has-refused-to-recycle-the-wests-plastics-what-now.</u>

small handling fee per container. In 2009, the law was expanded to include bottled water, and the handling fee was increased from 2 cents, which it had been set at since 1997, to 3.5 cents.

Over its 30-year history, New York's Bottle Bill has proven to be a highly effective means of diverting these containers from the waste stream, significantly reducing litter and increasing recycling rates. This program is recognized as New York's most effective litter-reduction measure. In 2019, New York's redemption rate was at 64%.¹⁹ According to DEC, the bottle bill reduces roadside container litter by 70%, and in 2016, 5.1 billion containers were recycled.²⁰

Additionally, states with bottle deposit laws have far better recycling rates than non-deposit states. According to the Container Recycling Institute, states with bottle deposit laws have a beverage container recycling rate of around 60%, while non-deposit states only reach about 24%.

Not only would the expansion of the state Bottle Bill increase recycling rates and make New York's environment and communities cleaner, it would also help municipal recycling programs that are currently facing a recycling crisis. China, which had been accepting massive amounts of plastic waste, stopped accepting contaminated plastic waste imports in January 2018, creating a standard many municipal recycling programs cannot meet.

When glass breaks in curbside containers it can make other materials far more difficult to recycle and sell. The expansion of the Bottle Bill to include wine, spirits, and hard cider would take a significant amount of the containers that municipal recycling programs are struggling with out of curbside recycling containers. Additionally, municipalities would save money from the costs of litter clean-ups and transportation costs associated with recycling.

Other states with bottle deposit programs have already moved forward with the recommended policies above. Maine's Bottle Deposit Law includes all containers covered in New York's existing Bottle Bill, plus wine, spirits, hard cider and most non-carbonated beverages. Maine has a 5-cent deposit for all beverages, except wine and liquor, which have a 15-cent deposit. Maine's redemption rate in 2017 was 84%. Other states with Bottle Deposit Laws that include noncarbonated beverages include: California, Hawaii, and Oregon. Oregon, in 2017, raised its deposit fee from 5-cents to 10-cents, which led to the state reaching a 90% redemption rate.²¹

It has been over ten years since the bottle bill was last expanded - it's time to finish the job and ensure most containers are included. This step will reduce consumer confusion about what can be recycled, ease municipal burdens, and keep communities cleaner.

Enact "Fair Repair" Legislation to Reduce Electronic Waste

Manufacturers of ubiquitous electronic products like cell phones, computers, tablets and digital audio systems refuse to share diagnostic information or replacement parts. As a result, consumers spend more time and pay more money to repair fixable items and generate an enormous amount of electronic waste as items are discarded instead of being fixed cheaply and locally. Fair Repair

¹⁹ Container Recycling Institute, Bottle Bills in the USA: New York, https://www.bottlebill.org/index.php/currentand-proposed-laws/usa/new-york²⁰ DEC, New York's Bottle Bill, <u>http://www.dec.ny.gov/chemical/8500.html.</u>

²¹ Profita, Cassandra, "Oregon Bottle Deposit System Hits 90 Percent Redemption Rate," OPB, January 18th, 2019, https://www.opb.org/news/article/oregon-bottle-deposit-redemption-rate-2018/.

legislation addresses these consumer and environmental problems by making information and parts accessible to do-it-yourselfers and small repair shops.

In light of China's refusal to accept electronic waste from the U.S. (in addition to other wastes), the U.S. must look to strategies to preserve finite natural resources and eliminate the volume of waste that is sent to landfills, incinerators and recycling facilities.

Cell phones, for example, are only a small part of the overall need of repair of personal electronics. A growing trend is seen in the design of electronics across all industries that make devices difficult or nearly impossible to repair.²² Fair Repair would allow consumers and independent repair shops access to diagnostic equipment and parts so they can extend the life of electronics and puts less strain on wallets. Importantly, repairing electronic devices will protect the environment by reducing e-waste: New Yorkers throw away over 23,600 cell phones every day.²³ Fixing electronic products instead of tossing them furthers the state's policy of reducing the flow of all electronic devices into the waste stream.

Maintain the Environmental Protection Fund

NYPIRG encourages the Governor and the Legislature to come together to maintain the Environmental Protection Fund (EPF) at \$300 million. EPF provides funding for numerous initiatives that are critical for protecting water quality, combating climate change, and keeping New York's public spaces clean. Additionally, EPF benefits every county of New York State, and supports over 350,000 jobs across a variety of sectors, and a recent study found that for every \$1 invested in the EPF, \$7 is returned to New York State.²⁴ It is critical to maintain funding for EPF in the SFY2021-22 budget.

* * *

Thank you for the opportunity to testify today. NYPIRG looks forward to working with the Legislature to ensure New York's SFY 2021-2022 budget protects the environment for all New Yorkers.

Table 1: UCMR-3 Data by Region – number of water systems with detections

²³ Proctor, Nathan. "Recharge Repair." February 1, 2018. Accessed March 20, 2018. https://drive.google.com/file/d/1-CL43uUqsXq4O2OnvbuMSGDCnwALev8c/view.

²² Carlozo, Lou. "These Are the 5 Toughest Electronics to Repair." Dealnews. July 14, 2015. Accessed March 16, 2018. <u>https://www.dealnews.com/features/These-10-Electronic-Devices-Are-Almost-Impossible-to-Repair/795102.html</u>.

²⁴ We Love New York, "The Environmental Protection Fund Works," <u>http://www.keepprotectingny.com./</u>

Contaminant	Capital Region	Central	Hudson Valley	Long Island	North Country	NYC	Southern Tier	Western
1,1-dichloroethane	0	0	1	25	0	0	1	1
1,2,3- trichloropropane	0	0	0	10	0	0	0	0
1,4-dioxane	1	1	5	34	0	1	4	2
4-androstene-3,17- dione	0	2	0	0	2	0	0	2
aerobic spores	0	0	1	0	0	0	0	0
bromomethane	2	0	0	1	0	0	0	0
chlorate	16	14	37	36	6	1	11	14
chloromethane	3	0	0	1	0	0	0	1
chromium	14	14	31	35	5	1	9	24
chromium-6	18	17	42	36	8	1	11	30
cobalt	0	0	1	22	0	0	1	0
HCFC-22	2	0	1	13	0	0	1	0
manganese	2	3	13	2	2	0	1	5
molybdenum	3	7	7	4	4	0	0	24
n-propylbenzene	0	0	0	0	1	0	0	0
РҒНрА	0	0	2	1	1	0	0	0
PFHxS	0	0	2	1	1	0	0	0
PFNA	0	0	0	1	0	0	0	0
PFOA	0	0	2	3	1	0	0	0
PFOS	0	0	2	2	0	0	0	0
strontium	18	17	46	37	8	1	11	32
testosterone	1	1	0	0	1	0	0	2
Vanadium	16	12	14	25	6	0	2	17

Table 2: UCMR-3 Statewide Data

CONTAMINANT	DETECTIONS	SYSTEM S	POPULATION	HIGHEST LEVEL DETECTED (ppb)	EPA HEALTH GUIDANCE (ppb)
1,1-dichloroethane	283	28	2,337,238	4.09	6.14 to 614
1,2,3-trichloropropane	57	10	1,559,592	1.02	0.0004 to 0.04
1,4-dioxane	516	49	11,595,918	34	0.35 to 35
4-androstene-3,17- dione	8	6	501,411	0.0041	NA
aerobic spores	1	1	25	1	NA
bromomethane	7	4	326,885	0.92	140
chlorate	1,844	135	14,984,975	1223.85	210

chloromethane	9	5	340,135	1.92	2.69 to 69
chromium	1,428	134	14,755,552	31	100
chromium-6	2,205	163	15,878,647	7.3	NA
cobalt	180	24	2,390,599	84	70
HCFC-22	54	17	2,149,497	5	NA
manganese	148	27	88,227	160	NA
molybdenum	297	49	3,961,659	25.42	40
n-propylbenzene	1	1	600	0.06	NA
PFHpA	12	4	1,192,000	0.082	NA
PFHxS	13	4	1,192,000	0.14	NA
PFNA	1	1	120,000	0.032	NA
PFOA	12	6	337,500	0.048	0.07
PFOS	13	4	1,170,500	0.53	0.07
strontium	2,653	170	15,966,772	2660	1500
testosterone	6	5	228,091	0.0022	NA
vanadium	707	92	5,277,408	6.97	21
1,3-butadiene	0	0	0	0	.0103 to 1.03
17-alpha- ethynylestradiol	0	0	0	0	0.035
17-beta-estradiol	0	0	0	0	.0009 to .09
enteroviruses (cell culture)	0	0	0	0	NA
enteroviruses (RT- qPCR)	0	0	0	0	NA
equilin	0	0	0	0	0.35
estriol	0	0	0	0	0.35
estrone	0	0	0	0	0.35
halon 1011	0	0	0	0	90
male specific phage	0	0	0	0	NA
noroviruses GIA	0	0	0	0	NA
noroviruses GIB	0	0	0	0	NA
noroviruses GII	0	0	0	0	NA
PFBS	0	0	0	0	NA
tellurium	0	0	0	0	NA
total coliforms	0	0	0	0	NA