

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)
AND ITS IMPACT ON WATER SYSTEMS NATIONWIDE



NAPOLI SHKOLNIK PLLC
ATTORNEYS AT LAW

**WORKING TO FIGHT
WATER CONTAMINATION**

 **NAPOLI SHKOLNIK PLLC**
PFAS WATER CONTAMINATION
& COST RECOVERY PROGRAM

1

WEBINAR MODERATOR



Billie Emas
Sales Associate
American Water Works Association

Billie Emas is the Sales Associate to the NE and SE territories in the Sales Department at AWWA. She has been with AWWA for six months and she has been corresponding and building relationships with the members, advertisers, exhibitors and sponsors with AWWA. She has over 20 years of experience marketing, sales, event planning and membership. Billie has a BS in Business Administration from Bowling Green State University.

2

Please consider the
environment before printing.

Enhance Your Webinar Experience

Close

- ✓ Email Programs
- ✓ Instant messengers
- ✓ Other programs not in use

GoToWebinar Support

<https://support.logmeininc.com/gotowebinar?labelid=4a17cd95>

3

Webinar Survey

Immediately upon closing the webinar

- Survey window opens
- Thank you!



4

Please consider the
environment before printing.

Products or Services Disclaimer

The mention of specific products or services in this webinar does not represent AWWA endorsement, nor do the opinions expressed in it necessarily reflect the views of AWWA

AWWA does not endorse or approve products or services



5

PANEL OF EXPERTS



Hank Naughton
Partner
Napoli Shkolnik
PLLC



Paul Napoli
Of Counsel
Napoli Shkolnik
PLLC



Michelle Greene
Associate
Napoli Shkolnik
PLLC

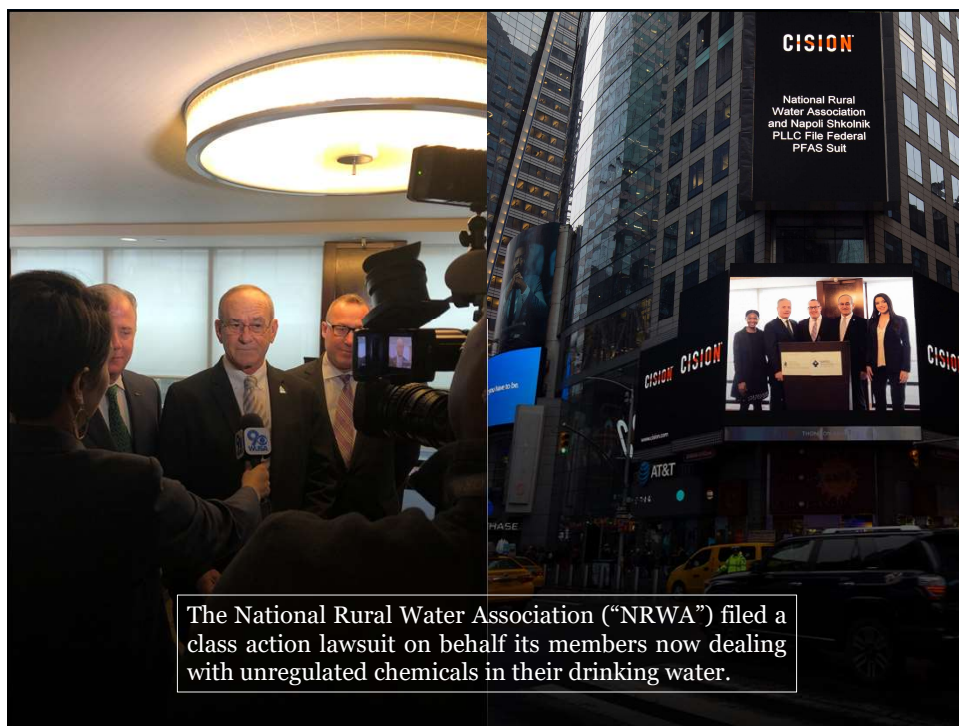


Walter Hang
CEO
Toxics Targeting, Inc.



6

Please consider the
environment before printing.



7

PFAS Background

What are Per- and Polyfluoroalkyls Substances (PFAS) also known as Perfluorinated Chemicals (PFCs)?

NAPOLI SHKOLNIK PLLC
ATTORNEYS AT LAW

PFAS Water Contamination & Cost Recovery Program

Attorney/Client Communication, Do Not Disclose

8

Please consider the
environment before printing.

PFAS Background

What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals that includes PFOA, PFOS, GenX, and many other chemicals. PFAS have been manufactured and used in a variety of industries around the globe, including in the United States since the 1940s.

PFOA and PFOS have been the most extensively produced and studied of these chemicals. Both chemicals are very persistent in the environment and in the human body – meaning they don't break down and they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

PFAS Exposure

PFAS are a group of man-made chemicals that have been in use since the 1940s, and are (or have been) found in many consumer products like cookware, food packaging, and stain repellants. PFAS manufacturing and processing facilities, airports, and military installations that use firefighting foams are some of the main sources of PFAS.

Source: epa.gov

Attorney/Client
Communication, Do Not
Disclose

Howcheng - CC BY-SA 3.0,
<https://commons.wikimedia.org/w/index.php?curid=4423042>

9

What are Perfluorinated Chemicals (PFCs) and their relation to PFAS?

Scientists use "PFCs" as an abbreviation for two distinct but related sets of chemicals. Whenever you see the abbreviation, make sure you understand how the author or publisher is using it.

PFCs can be an abbreviation for either:

- perfluorinated chemicals, or
- a subset of perfluorinated chemicals called perfluorocarbons

The term Perfluorinated Chemicals (PFCs) refer to Perfluoroalkyl compounds, which are human-made substances that do not occur naturally in the environment. PFCs include but are not limited to:

- Perfluorooctanoic acid (PFOA)
- Perfluorooctane sulfonic acid (PFOS)

Citations

1. Kissa 2001
2. Schultz et al. 2003
3. 3M 1999
4. Hekster et al. 2003;
5. DuPont 2008
6. EPA 2008a

10

PFC Emissions

PFCs have been manufactured for more than 50 years where the substances PFOS and PFOA are part of a group of old-generation PFCs which will be used to a lesser extent in the future due to their potential hazards.

These hazards have resulted and will result in [litigation] and a number of [national] and international legislative bans worldwide.

Source: epa.gov

Attorney/Client Communication,
Do Not Disclose

Posner: Perfluorinated compounds – occurrence and uses in products: 1-14. 2011.

10

Please consider the
environment before printing.

PFCs Background

What are PFCs?

Environmental - Perfluoroalkyls are very stable compounds and are resistant to biodegradation, direct photolysis, atmospheric photooxidation, and hydrolysis (3M 2000; EPA 2008a; OECD 2002, 2007; Schultz et al. 2003). The chemical stability of perfluoroalkyls and the low volatility of these substances in ionic form indicate that perfluoroalkyls will be persistent in water and soil (3M 2000; Prevedouros et al. 2006).

[Indicating that the compounds do not easily chemically react with their environment or break down]

Bioavailability

Perfluoroalkyls are widely detected in humans and animals, indicating that several of these substances are bioavailable. (de Vos et al. 2008; Furdui et al. 2007; Martin et al. 2004b).

[Suggesting that absorption by the human body occurs relatively easily]

In living organisms, perfluoroalkyls bind To protein albumin in blood, liver, and [reproductive organs] (de Vos et al. 2008; Kissa 2001)

11

Attorney/Client Communication, Do Not Disclose

11

PFOA/PFOS Contamination

Where did it come from?



NAPOLI SHKOLNIK PLLC
ATTORNEYS AT LAW

PFAS Water Contamination & Cost Recovery Program

Attorney/Client Communication, Do Not Disclose

12

Please consider the
environment before printing.

PFCs Contamination

Where did it come from?

PFOA/PFOS Manufacturers

PFOA was produced by eight major U.S. companies, including:

- Arkema
- Asahi
- Ciba
- Clariant
- Daikin
- DuPont
- 3M/Dyneon (primary producer)
- Solvay Solexis

PFOS was solely produced by one company in the United States:

- 3M

AFFF Manufacturers

PFOS-based aqueous film-forming foam (AFFF) was produced by six manufacturing companies, including:

- Ansul
- Chemguard
- DuPont
- Dynax
- Kidde
- Solberg

Together, these companies have formed the Fire Fighting Foam Coalition (FFFC) to represent the industry's interests on issue related to the environment.

Attorney/Client Communication, Do Not Disclose

13

Firefighting Foam

Aqueous Film-Forming Foam (AFFF) containing PFCs



NAPOLI SHKOLNIK PLLC
ATTORNEYS AT LAW
PFOA and PFOS Water Contamination & Cost Recovery Program

Attorney/Client Communication, Do Not Disclose

14

Please consider the
environment before printing.

AFFF Background

How are AFFFs used?

- In the military and in airports across the country, PFCs were most commonly used in firefighting foams, referred to as **Aqueous Film-Forming Foam (AFFF)**.
- The foam and film layers act to separate oxygen from the fuel surface, and are therefore able to stop the chemical reaction from burning.
- Military and airport personnel have practiced putting out fires with AFFF at numerous Fire/Crash Training Areas located at airports and military bases nationwide.

Oftentimes, this training occurred in **burn pits** recognizable by a blackened, repeatedly-burned airplane frame at the center of an unlined dirt pit.

Attorney/Client Communication, Do Not Disclose

Military Specification (MILSPEC)

AFFF is either **3%** or **6%** by volume in a solution of water.

MILSPEC AFFF is used to extinguish **Class B (flammable liquid)** fuel fires.



15



Marines extinguish a blaze during a live fire training exercise at the Marine Corps Air Station Cherry Point, in Havelock, North Carolina, on Aug. 28, 2013. Photo: Lance Cpl. Shawn Valosin/U.S. Marines

AFFF Background

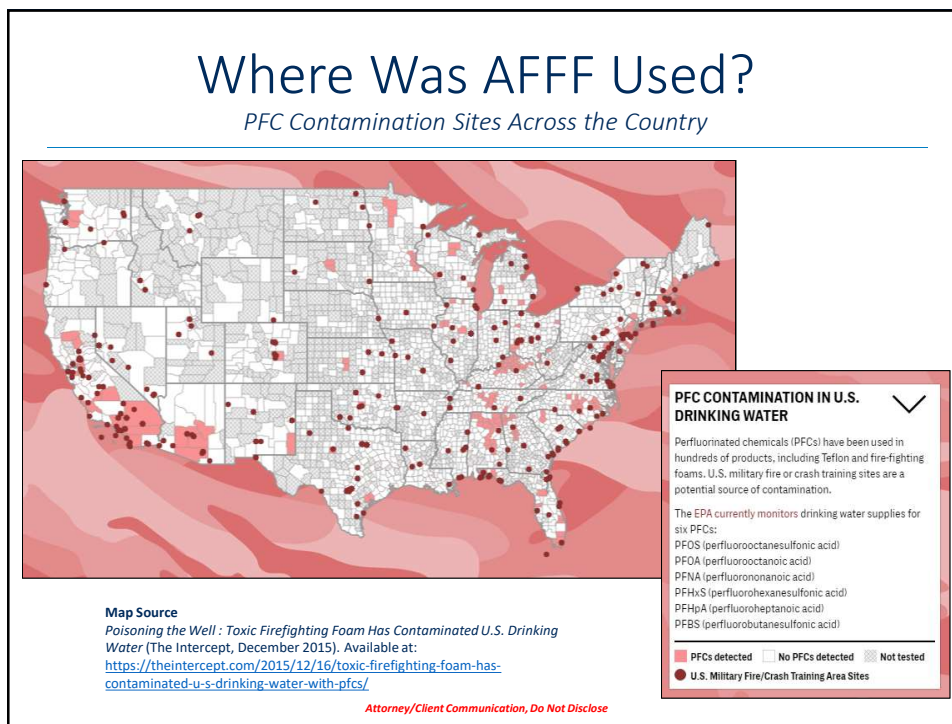
Fire Fighter Training

- While all fire fighting requires training, **putting out fuel fires via AFFF requires more rigorous [and repeated] training** due to the complicated nature of the equipment used and various techniques of application.
- The repetitive nature of AFFF training can lead to increased likelihood of contamination to the nearby environment.

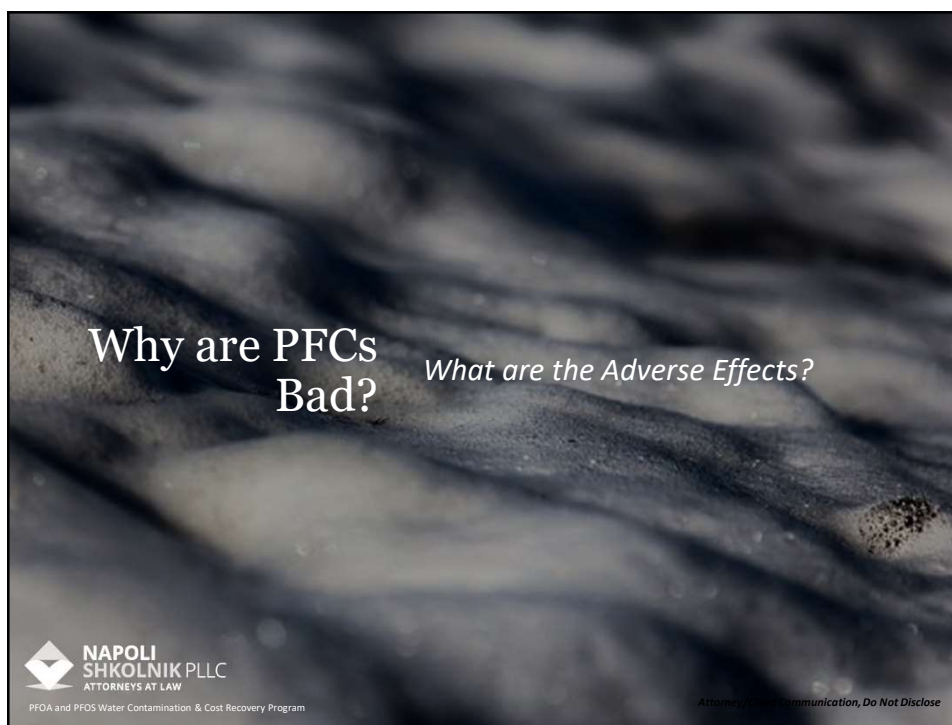
Attorney/Client Communication, Do Not Disclose

16

Please consider the
environment before printing.



17



18

Please consider the
environment before printing.

Why Are PFCs Bad?

*Effects of Exposure per the Center for Disease and Control Prevention (CDC)
and the Environmental Protection Agency (EPA)*

- CDC: PFAS are extremely persistent in the environment and resistant to typical environmental degradation processes.
- CDC: PFOS and PFOA also persist in the human body and are eliminated slowly, with a half life of 2 to 9 years.
- EPA: Exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants (e.g., low birth weight, accelerated puberty, skeletal variations), cancer (e.g., testicular, kidney), liver effects (e.g., tissue damage), immune effects (e.g., antibody production and immunity), thyroid effects and other effects (e.g., cholesterol changes).

19

Attorney/Client Communication, Do Not Disclose

19

Why Are PFCs Bad?

PFCs are Easily Absorbed and Not Easily Metabolized

Estimated Elimination Half-Lives for Specified PFCs

	Humans	Primates	Rats	Mice
PFOA	8 years ¹	20.1-32.6 days ⁶	Males: 44-322 hrs Females: 1.9-16.2 hrs	
PFOS	5.4 years ¹	110-170 days ^{4,5}	179-1,968 hrs	731-1,027 hrs
PFHxS	8.5 years ¹	87-141 days ⁷	Males: 382-688 hrs Females: 1.03-41.28 hrs	597-643 hrs
PFBuS	665 hours ²	8.0-95.2 hours ^{2,8}	2.1-7.42 hrs	
PFBA	72 hours ³	40.3-41.0 ³	1.03-9.22 hrs	2.79-13.34 hrs

Citations

1. Olsen et al. 2007a
2. Olsen et al. 2009
3. Chang et al. 2008b
4. Chang et al. 2012

7. Sundstrom et al. 2012

8. Chengelis et al. 2009

5. Seacat et al. 2002
6. Butenhoff et al. 2004c

20

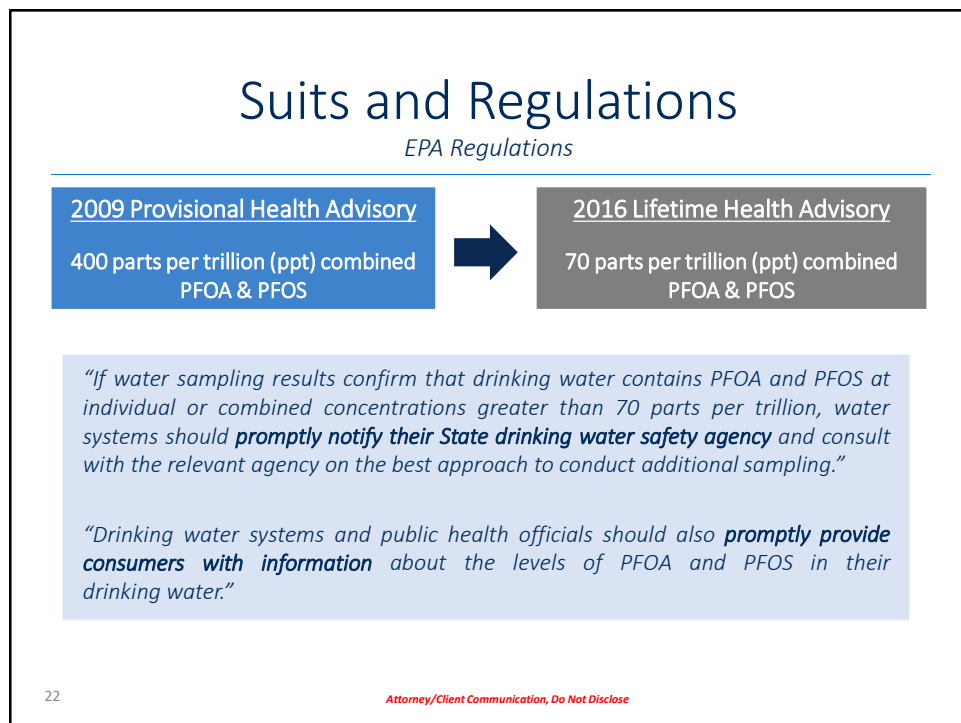
Attorney/Client Communication, Do Not Disclose

20

Please consider the
environment before printing.



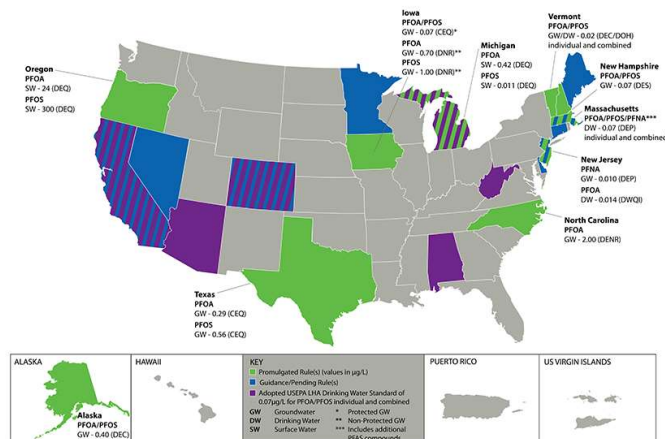
21



22

Please consider the
environment before printing.

States With Numerical PFAS Limits



23

Treatment & Remediation

Filtration Systems

- According to a study conducted by the Water Research Foundation, GAC and Ion Exchange were most effective at removing long-chain PFAs, such as PFOA and PFOS
- **Granular Activated Carbon (GAC):**
 - Tests show successful removal of PFOA, as well as PFBA, PFPA, PFFH, and PFDA, in groundwater via GAC filtration systems
 - Requires incineration of PFC waste to completely destroy PFOA/PFOA
- **Ion Exchange:**
 - Ion exchange resins have high adsorption capacities, long operation days, and high PFOS recovery percentages, suggesting that anion exchange resins are suitable materials for removal of PFOS' in aqueous solutions
 - Removal of around 10-90% of PFOA and >90% of PFOS for Ion Exchange

24

Attorney/Client Communication, Do Not Disclose

24

Please consider the
environment before printing.

How We Can Help

- The Napoli Shkolnik investment into the **PFOA and PFOS Costs Recovery Program** is a risk we take because we care and believe that we can be successful
- Most firms cannot invest what is required to be successful in similar litigation
- Many firms do not have the resources to properly calculate your damages, and that can be disastrous if your municipality does not get a full return on the damages rightfully owed
- Napoli Shkolnik is committed to utilizing every resource in order to achieve a win for your community

NAPOLI SHKOLNIK PLLC
ATTORNEYS AT LAW
PFAS Water Contamination & Cost Recovery Program

SECURITY

Attorney/Client Communication, Do Not Disclose

25

Working Together

1. Free Evaluation For Your District
2. Investigate the Source of the Contamination
3. Sue Chemical Manufacturers
 - Products liability for defective design of AFFF
 - Failure to warn about the health effects of AFFF
4. We can help you recover capital costs associated with the installation of treatment systems at **NO COST** to your municipality
 - We charge solely on a contingency basis, pay all costs, and only take a fee if we are successful
 - 25% Retainer

NAPOLI SHKOLNIK PLLC
ATTORNEYS AT LAW

Attorney/Client Communication, Do Not Disclose

26

Please consider the
environment before printing.

About Our Principals



Marie Napoli, Partner
Ms. Napoli is a driving force behind the push to have Congress create a Victim's Compensation Fund for families affected by contaminated water. This fund could draw from federal and state money to pay for residents' health costs. Marie and the NS legal team visited Washington D. C. with families affected by contaminated water so that the families could share their stories with Members of Congress.



Hunter J. Shkolnik, Partner
Mr. Shkolnik has appeared on national networks such as NBC and Fox News to discuss the Water Crises occurring across the country. He is also a sought-after speaker on water contamination, Co-Chairing and speaking at several Litigation Conferences focusing on Lead Poisoning. Mr. Shkolnik's legal achievements have been industry and peer recognized by Super Lawyers®.



Paul J. Napoli, Of Counsel
Mr. Napoli has litigated extensively on behalf of municipal clients for contamination to land and water supplies resulting from petroleum and related chemical spills. He led the team who obtained more than \$50million for environmental contamination of municipal water supplies by leaks of petroleum additive.

Named Co-Liaison Counsel in the Flint Water Crisis Litigation by U.S. District Judge Judith E. Levy.

Named Co-Lead Counsel in the AFFF Products Liability Litigation by U.S. District Judge Richard Mark Gergel.

Named Liaison Counsel in the Colorado PFOA/PFOS Toxic Tort Litigation by U.S. District Judge R. Brooke Jackson.

Your Environmental Team



Louise R. Caro
Partner



Andrew W. Croner
Partner



Hank Naughton
Partner



Lilia Factor
Associate



Patrick J. Lanciotti
Associate



Michelle Greene
Associate



NATIONAL RURAL WATER ASSOCIATION
CORPORATE MEMBER
NRWA



AWWA
MEMBER

27

SERVING YOU LOCALLY FROM OFFICES NATIONWIDE



PRINCIPAL OFFICE
360 LEXINGTON AVENUE, 11TH FLOOR
NEW YORK, NEW YORK 10017

(844) 230-7676 | NAPOLILAW.COM

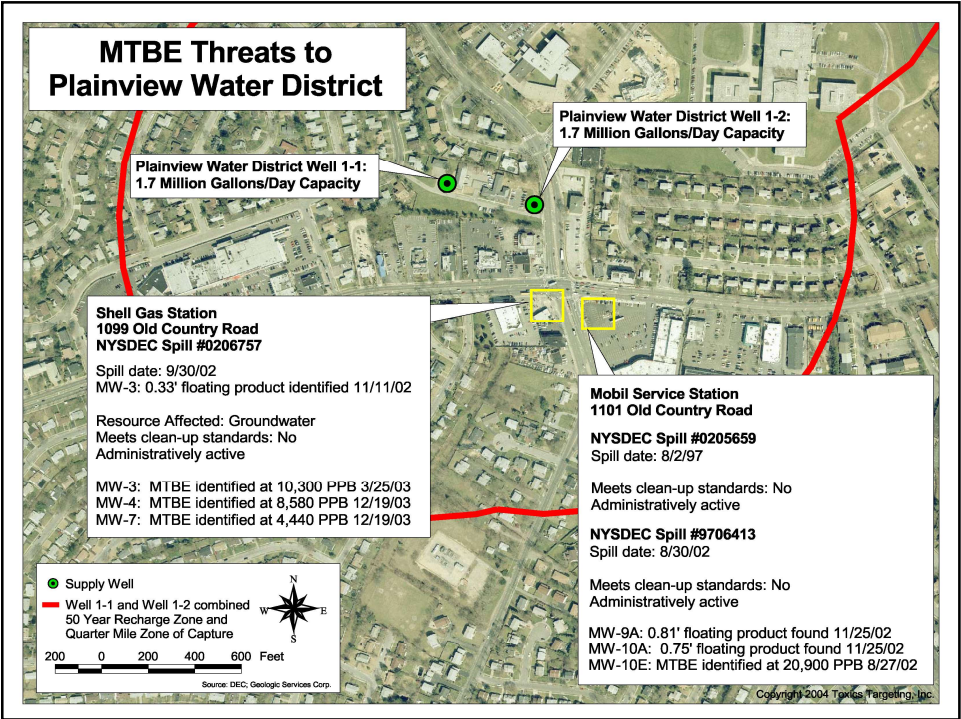
MELVILLE, NEW YORK • LOS ANGELES, CALIFORNIA • WILMINGTON, DELAWARE • COCONUT GROVE, FLORIDA • OVERLAND PARK, KANSAS • FLINT, MICHIGAN • MARLTON, NEW JERSEY • CLEVELAND, OHIO • AUSTIN, TEXAS • WASHINGTON D.C.

Copyright © 2020 Napoli Shkolnik PLLC Attorneys at Law. All rights reserved. Last updated October 22, 2020. This publication is for informational purposes only, does not constitute legal advice and may not reflect the most current legal developments. This publication does not create an attorney-client relationship, only a written contract between the parties can establish an attorney-client relationship. Napoli Shkolnik PLLC and all contributing authors expressly disclaim all liability to any person with respect to the contents of this publication. For complete details, read our Terms of Use and Privacy Policy at napolilaw.com.

28

Please consider the
environment before printing.

Toxic Site Databases Analyzed In Your Report		
Search Radius		
One-Mile		1) National Priority List for Federal Superfund Cleanup: a listing of sites known to pose environmental or health hazards that are being investigated or cleaned up under the Federal Superfund program.
Half-Mile		2) Delisted National Priority List Sites: a listing of NPL sites that have been removed from the National Priority List.
One-Mile		3) New York Inactive Hazardous Waste Disposal Site Registry: a state listing of sites that can pose environmental or public health hazards requiring investigation or clean up.
One-Mile		4) New York Inactive Hazardous Waste Disposal Site Registry Qualifying: a state listing of sites that qualify for possible inclusion to the NYDEC Inactive Haz. Waste Disposal Site Registry.
One-Mile		5) RCRA Corrective Action Activity (CORRACTS): waste facilities with RCRA corrective action activity reported by the USEPA.
Half-Mile		6) CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System): a federal listing of Non-NFRA sites that can pose environmental or public health hazards requiring investigation or clean up.
Half-Mile		7) CERCLIS NFRA: a federal listing of CERCLIS sites that have no further remedial action planned.
Half-Mile		8) New York State Brownfield Cleanup Sites: a listing of sites that are abandoned, idled or under-used industrial and commercial sites where expansion or redevelopment is complicated by real or perceived environmental contamination.
Half-Mile		9) New York Solid Waste Facilities Registry: active and inactive landfills, incinerators, transfer stations or other solid waste management facilities.
Half-Mile		10) New York and Federal Hazardous Waste Treatment, Storage or Disposal Facilities: sites reported by the NYS manifest system and the USEPA's Resource Conservation and Recovery Act Information System (RCRIS). Also includes the following database: • RCRA violations: waste facilities with violations reported by the USEPA pursuant to the Resource Conservation and Recovery Act.



Please consider the
environment before printing.

The New York Times

NEW YORK, THURSDAY, JUNE 26, 2001

LONG ISLAND

Exxon Mobil To Face Suit Over a Spill In Nassau

By AL BAKER

GARDEN CITY, N.Y., June 27 — The Plainville Water District, one of Long Island's largest drinking water suppliers, plans to file a lawsuit on Thursday against an oil company for a spill of M.T.B.E., a gasoline ingredient that is a possible cause of cancer, officials said today.

Paul J. Granger, the superintendent of the district, which supplies water serving 11 wells to 10,000 residents on the eastern edge of Nassau County, said the spill at a former Mobil service station in Plainville posed no immediate health threat. Though state officials say the chemical has seeped up to groundwater there, none of the spilled M.T.B.E., or distilled, tertiary butyl ether, has seeped into any of the district's wells. But because the drinking water could become contaminated if the plume is permitted to linger underground — forcing a cleanup that could cost taxpayers up to \$4 million — the water district decided to sue the Exxon Mobil Corporation in State Supreme Court in Nassau County in an effort to speed a cleanup, Mr. Granger said.

"We are being proactive and preventive through legal means," said Mr. Granger, the former chairman of the Long Island Water Conference, a private group representing 12 water suppliers serving three million people. "We are calling upon the Exxon Mobil Corporation to take swift action to implement a full-scale investigation and cleanup without further delay."

The company has already agreed to clean up the spill and has submitted a plan to the state, said Mark Lowery, a spokesman for the State Department of Environmental Conservation. "They have been fully cooperative from the start, and we expect that to continue," he said.

But Mr. Granger said the company was moving "at glacial speed."

Barry Wood, an Exxon Mobil spokesman, declined to comment today, saying, "It would be premature and inappropriate for Exxon Mobil to comment on the suit since we have not yet been served with the papers."

M.T.B.E. has been added to gasoline in many states since the 1970's to increase the octane rating and make the fuel burn more cleanly. But the additive has been found to be a possible cause of cancer and other health problems in humans. For that reason, and because it gets easily into groundwater and is hard to remove, it is being phased out in New York, and will not be allowed after 2004.

There have been more than 1,000 spills in New York State resulting in water or soil contamination with M.T.B.E., state officials say. The largest concentration of spills has been on Long Island.

Several well owners in other parts of the state sued the gasoline industry in January, and that suit has been consolidated with a national class action suit on behalf of well owners.

The Plainville suit contends that Exxon Mobil has polluted the groundwater there as a result of its use of M.T.B.E. in its gasoline. It says that the company's use of M.T.B.E. was negligent because the company "knew or should have known" that the chemical is water soluble and is a potential carcinogen. It alleges that the company's negligence caused the spill, and that the spill has caused the contamination of the groundwater.

The suit seeks punitive and compensatory damages, Mr. Bern said. Mr. Bern said the company failed to warn anybody of the possibility that it could pollute the drinking water.

Mr. Lowery, of the state environmental department, said Exxon Mobil notified the state of the spill in August 1997, after it removed its underground storage tanks and gasoline pump islands at the former station on Old Country Road. The company removed 1,013 tons of affected soil. "They excavated it as far as they could, and they still had contamination," Mr. Lowery said. He said the spill seeped down through a clay barrier and into the groundwater 75 to 100 feet below the surface. He said that the state was not aware of any private water wells in the area of the spill, and that the spill did not appear to have traveled beyond the boundary of the former service station lot.

Mr. Lowery said that the nearest district well lies about 600 feet northwest of the edge of the plume. Since groundwater flows southeast, he said it was unlikely that the well would be contaminated.

But Mr. Granger said the distance between the plume and the wells was dangerously close because each well pumps 1.7 million gallons a day and can draw water from an area of up to one-quarter mile.

For concern is that the state might not keep up with the cleanup. In covering of M.T.B.E. spills — which are in the pure form and a half inch, or less, in diameter — the procedure of Exxon Mobil is to excavate the spill and remove it. But the state has not been keeping up with the cleanup, Mr. Granger said.

31

THE ITHACA JOURNAL

ITHACAJOURNAL.COM • SATURDAY, DECEMBER 22, 2018

PART OF THE USA TODAY NETWORK



TOXIC TIME BOMB

A LEGACY OF POLLUTION



Testing revealed that the Thomas A. Hurley Athletic Complex has high levels of polychlorinated biphenyls, or PCBs, which are carcinogens. (AP PHOTO/STAFF PHOTO)

Elmira High contamination urgent among NY's cleanups

Tom Willner *Times Herald* USA TODAY NETWORK

While digging up polluted and toxic soil at Elmira High School last summer, excavators hit a jarring surprise three feet below the parking lot — immovable concrete walls extending to unknown depths. Environmental engineers overseeing the job knew the school was built on land polluted by the former Remington Rand factory, but they didn't expect to encounter physical remains of the offending structure. "They were massive," said Heidi Druks, a project manager with the state Department of Environmental Conservation. "Industrial relics — that's the best way to describe them." See TOXIC, Page 1A

Infamous site just the tip of New York's pollution woes

Tom Willner *Times Herald* USA TODAY NETWORK

Elmira High School is one of 1,290 active and 220 potential toxic legacy sites statewide, according to an analysis of state records by the Elmira Star-Gazette. Some, like the former IBM site in Endicott now owned by 3M Electronics, are still working factories. Others, such as the Morse Industrial area in Ithaca, are abandoned or mostly abandoned. The largest, by area, is the Seneca Army Depot. The former munitions storage and disposal facility covering 10,600 acres in Seneca County is polluted with an array of hazards ranging from industrial solvents to radioactive waste, the extent of which is still being uncovered. See POLLUTION, Page 1A

32



INACTIVE HAZARDOUS WASTE DISPOSAL SITE REGISTRY INFORMATION REQUEST

SAINT-GOBAIN MCCAFFREY STREET
14 MCCAFFREY STREET

HOOSICK FALLS, NY 12090

Facility Id: 442046

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL SITE INFORMATION

CLASSIFICATION CODE: 02
CLASSIFICATION CODE DESCRIPTION:
Significant threat to the public health or environment - action required.

REGION: 4
SITE CODE: 442046
DEC ID: 521213

NAME OF SITE: Saint-Gobain McCaffrey Street
STREET ADDRESS: 14 McCaffrey Street
CITY: Hoosick Falls
ZIP: 12090
TOWN: Hoosick
COUNTY: Rensselaer
ESTIMATED SIZE: 6.44 Acres

SITE TYPE: Dump- Structure- Lagoon- Landfill- Treatment Pond-

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:
IDENTIFIER
NYD004986741
SOURCE
RCRA EPA ID No.

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:
CURRENT OWNER(S):
NAME: Saint-Gobain Performance Plastics Corporation
Pierre-Andre de Chalendar
ADDRESS: 750 East Swedesford Road
Valley Forge, PA 19482
Owner Type: PRP - Class 2 HazSubs
OWNER(S) DURING DISPOSAL:

33

OPERATOR(S) DURING DISPOSAL:
NAME: Saint-Gobain Performance Plastics Corporation
ADDRESS: 14 McCaffrey Street
Hoosick Falls, NY 12090
Operator Type: PRP - Class 2a/3/4/5 HazSubs

DOCUMENT REPOSITORY(S):
NAME: Cheney Library
ADDRESS: 73 Classic Street
Hoosick Falls, NY 12090-0177

HAZARDOUS WASTE DISPOSAL PERIOD:

SITE DESCRIPTION:
Location: The Saint-Gobain McCaffrey Street Site is a 6.41-acre site located at 14 McCaffrey Street in the village of Hoosick Falls. Site features: the site is occupied by an active manufacturing facility. The remainder of the site consists of parking areas and green space (lawn.)The northeast corner of the parcel is woodland. Current Use: Saint-Gobain Performance Plastics uses the facility for converting raw material resin powder into sheets of resin plastic of a variety of thicknesses and lengths for shipment to other facilities for further processing into a variety finished products. Past Use of the Site: The facility has been operational since 1956 under a number of corporate owners manufacturing a variety of resin products which in some cases utilized perfluorooctanoic acid (PFOA) in their manufacturing processes.
Site Geology and Hydrogeology: Groundwater is found in glacial outwash deposits at a depth of approximately 10 feet below ground surface.

CONFIRMED HAZARDOUS WASTE DISPOSED:
TYPE
perfluorooctanoic acid
QUANTITY
UNKNOWN

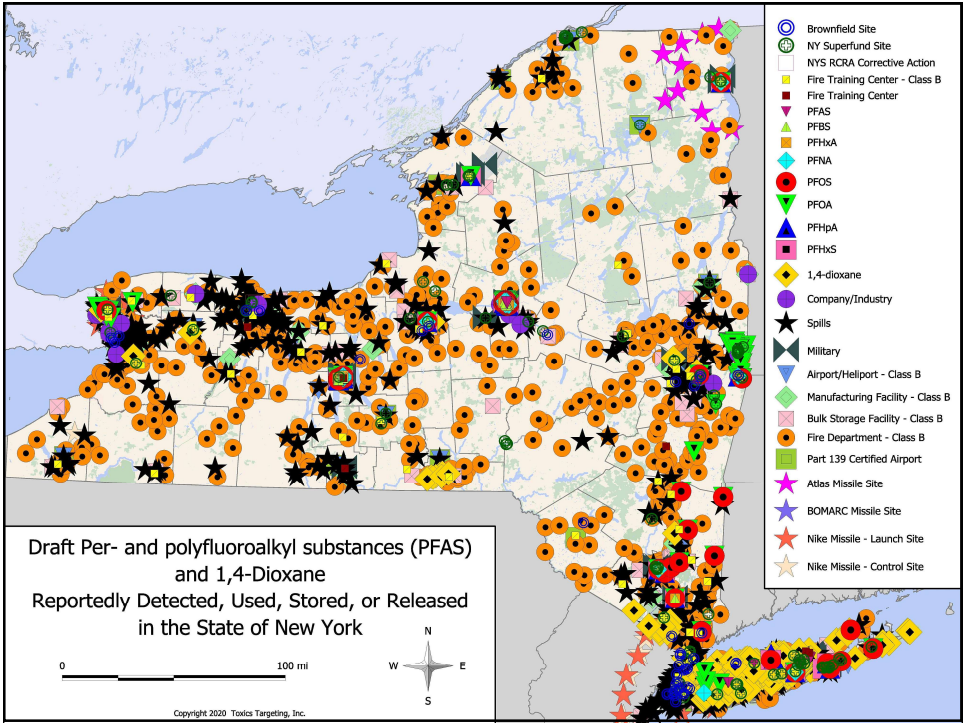
ASSESSMENT OF ENVIRONMENTAL PROBLEMS:
Perfluorooctanoic acid (PFOA) has been found in groundwater at the site at concentrations up to 18,000 parts per trillion (ppt), which exceeds a USEPA health advisory level for drinking water of 70 ppt.

ASSESSMENT OF HEALTH PROBLEMS:
Sampling by the NYS Department of Health and the Village of Hoosick Falls has identified the presence of perfluorooctanoic acid ((PFOA) in public and private water supplies in and near the Village. Actions should be taken to reduce human exposures to PFOA in these drinking water supplies. These actions include measures to address the contamination in the Village's municipal supply (e.g., installation of a treatment system) and actions to address individual wells that are not part of the municipal supply (e.g., point-of-entry or point-of-use filters). In the interim, residents should continue to use the existing bottled water program or rely on individual treatment systems until longer-term solutions are in place to remove PFOA from the water. Additional sampling is being completed to evaluate where and how people may be exposed to site-related contaminants.

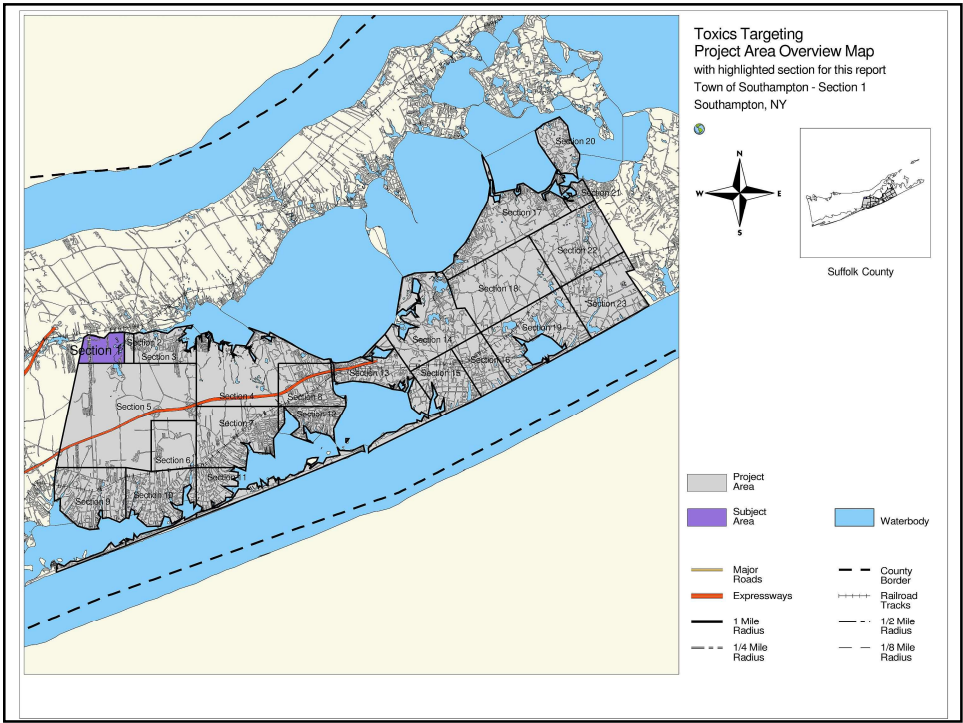
PROJECT COMPLETIONS:
Operable Unit 02A - IRM - Village Municipal Water Supply Full Capacity GAC System
PROJECT DESCRIPTION
Remedial Action IRM - Village Municipal Water Supply GAC System
END DATE STATUS
02/07/2017 Actual

34

Please consider the environment before printing.

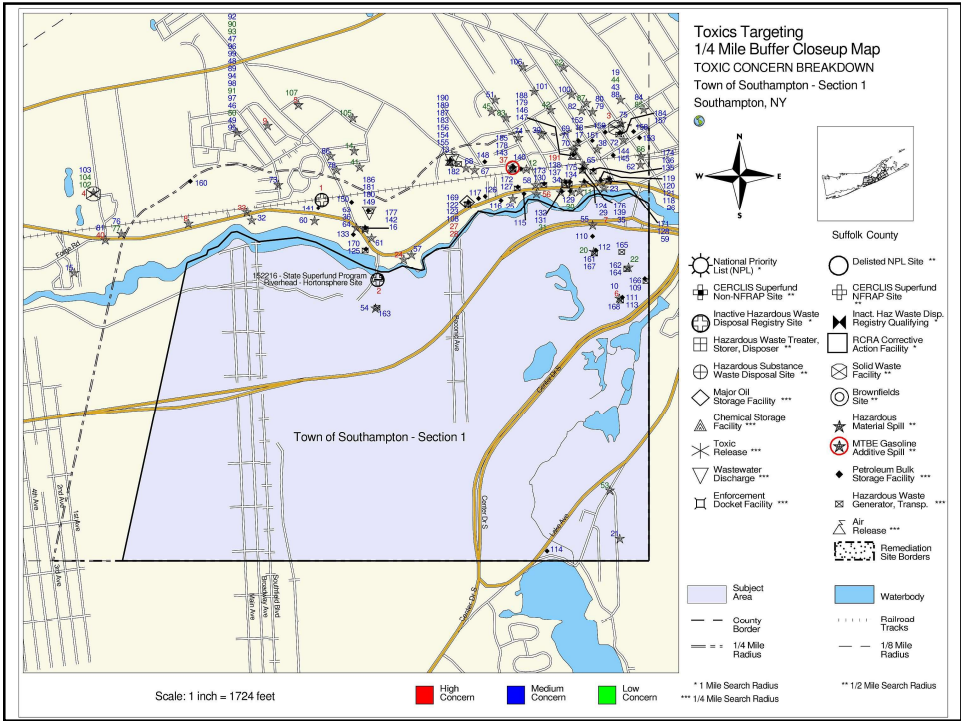


35



36

Please consider the
environment before printing.



37

Copyright 2019 Toxics Targeting, Inc. March 19, 2019 Reported PFAS Concerns in Southampton Page 18

Identification Number 6 **HAMPTON BAYS FIRE DEPARTMENT** **Facility Id: 152249**
69 WEST MONTAUK HIGHWAY HAMPTON BAYS, NY 11946

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: NO CHANGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL SITE INFORMATION

CLASSIFICATION CODE: 02 REGION: 1 SITE CODE: 152249
CLASSIFICATION CODE DESCRIPTION: DEC ID: 554694
Significant threat to the public health or environment - action required.

NAME OF SITE: Hampton Bays Fire Department
STREET ADDRESS: 69 West Montauk Highway
CITY: Hampton Bays ZIP: 11946 TOWN: Southampton
COUNTY: Suffolk

SITE TYPE: Dump- Structure- Lagoon- Landfill- Treatment Pond- ESTIMATED SIZE: 2.07 Acres

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:
IDENTIFIER SOURCE
1-20171005-236 Agreement/Consent Order Date
11/8/17 Agreement/Consent Order Number

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:
CURRENT OWNER(S):
NAME: Hampton Bays Fire District
Kevin Kenny
ADDRESS: PO Drawer 800
Hampton Bays, NY 11946
NAME: Hampton Bays Fire District
Rick Duran
ADDRESS: PO Drawer 800
Hampton Bays, NY 11946
OWNER(S) DURING DISPOSAL:

38

Please consider the
environment before printing.

Copyright 2019 Toxics Targeting, Inc. March 19, 2019Reported PFAS Concerns in SouthamptonPage 19

OPERATOR(S) DURING DISPOSAL:
NAME: Hampton Bays Fire Department
Chief Tom Gorman
ADDRESS: 69 West Montauk Highway
Hampton Bays, NY 11946

HAZARDOUS WASTE DISPOSAL PERIOD:

SITE DESCRIPTION:
Location: The site is a 2.07 acre parcel in suburban area of Hampton Bays, Town of Southampton, Suffolk County.

Site Features: The site is relatively flat and includes the Hampton Bays Fire Department's 5-bay firehouse and a maintenance building. The remaining portion of the site is covered by asphalt and grass.

Current Zoning and Land Use: The site is currently utilized by the Hampton Bays Fire Department. The site is situated within a residential and commercial area.

Past Use of the Site: The site has been utilized by the Hampton Bays Fire Department since the 1930's. In 2008, the Hampton Bays Fire Department purchased aqueous film forming foam (AFFF) for fire suppression, which frequently contain perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS).

Site Geology and Hydrogeology: Site geology consists of coastal plain deposits that includes sand with some silt and gravel. Groundwater is approximately 40 feet below ground surface and flows to the south-southwest.

CONFIRMED HAZARDOUS WASTE DISPOSED:

TYPE	QUANTITY
perfluorooctanoic acid	UNKNOWN
Perfluorooctane Sulfonic Acid	UNKNOWN

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Nature and Extent of Contamination: Containers of aqueous film forming foams (AFFF) for fire fighting were present onsite, which are known to contain per- and polyfluoroalkyl substances (PFAS), such as perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA). Onsite cesspools contained PFOS up to 1.7 parts per billion (ppb).

Onsite groundwater contained PFOS up to 2,400 parts per trillion (ppt) and PFOA up to 250 ppt. The groundwater detections are above the United State Environmental Protection Agency's Health Advisory Level of 70 ppt for combined PFOS and PFOA.

Site contamination extends ~630 feet to the southeast towards the Hampton Bays Ponquoque Avenue well field based on detections in groundwater by Suffolk County Department of Health Services and supply water by the Water District. The three supply wells have been shutdown and a treatment system was designed to remove the contamination. At this point two of the three supply wells have been connected to the treatment system and are approved for operation.

ASSESSMENT OF HEALTH PROBLEMS:

Access to the site is unrestricted and people may come in contact with site related compounds in soil if they dig below ground surface. People are not drinking contaminated water because the public water supply that serves the area is treated to remove contaminants before the water is distributed to consumers.

39

Copyright 2019 Toxics Targeting, Inc. March 19, 2019Reported PFAS Concerns in SouthamptonPage 1

INACTIVE HAZARDOUS WASTE DISPOSAL SITE REGISTRY INFORMATION REQUEST

Identification Number 1WESTHAMPTON LANDFILL
OLD COUNTRY ROAD

SOUTHAMPTON, NY 11942

Facility Id: 152060

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: UNKNOWN

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL SITE INFORMATION

CLASSIFICATION CODE: N
CLASSIFICATION CODE DESCRIPTION:
No further action

REGION: 1

SITE CODE: 152060
DEC ID: 55842

NAME OF SITE: Westhampton Landfill
STREET ADDRESS: Old Country Road
CITY: Southampton

ZIP: 11942

TOWN: Southampton
COUNTY: Suffolk

ESTIMATED SIZE: 28 Acres

The following site type information has been deleted from the registry. Data reflects previous information.
SITE TYPE: Dump- Structure- Lagoon-X Landfill-X Treatment Pond-

INSTITUTIONAL/ENGINEERING CONTROLS:
None reported

CROSS REFERENCES:
IDENTIFIER

SOURCE

The following cross reference(s) have been deleted from the registry. Data reflects previous information.
52-S-26#
NYD980762777

Muni. Waste ID
CERCLA EPA ID No.

SITE OWNER/OPERATOR/REPOSITORY INFORMATION:
CURRENT OWNER(S):
NAME: TOWN OF SOUTHAMPTON

Owner Type: Local Government

40

Please consider the environment before printing.

A Cost Recovery Program: PFAS Water Contamination
October 22, 2020

Copyright 2019 Toxics Targeting, Inc. March 19, 2019Reported PFAS Concerns in SouthamptonPage 2

ADDRESS: HAMPTON ROAD
SOUTHAMPTON, NY 11968

OWNER(S) DURING DISPOSAL:
NAME: TOWN OF SOUTHAMPTON
ADDRESS:

OPERATOR(S) DURING DISPOSAL:
NAME: TOWN OF SOUTHAMPTON
ADDRESS: 20 JACKSON AVE.
HAMPTON BAYS, NY 11946
Operator Type: Local Government

NAME: Town of Southampton / Highway Dept.
ADDRESS: 20 Jackson Avenue
Hampton Bays, NY 11946

The following disposal period has been deleted from the registry. Data reflects previous information.

HAZARDOUS WASTE DISPOSAL PERIOD: from 1968 to 1986

SITE DESCRIPTION:
This site is an active household refuse transfer station located on the site of a municipal landfill that was used only in 1968. The site is also used as a storage yard for highway maintenance materials. A plume of 1,1,2-trichloroethylene, tetrachloroethylene, 1,2-dichloropropane and cis-dichloroethylene was found and investigated by the Suffolk County Department of Health Services (SCDHS) in 1985. Apparently the plume "extends in a northeasterly direction from its discharge boundary along a small stream just west of Jagger Lane for approximately one-half mile." The origin point has not been precisely defined. The consultant has interpreted this to mean that the plume extended south of Old Country Road from a point north of the landfill. This may not be the case, as the plume may not extend north of Old Country Road. Regardless of the specific location of the plume, the landfill contained an area of leaching pits, where cesspool wastes were disposed. There is no documentation that hazardous wastes were ever disposed of at the site. A Phase I Investigation was completed in 1987 and a State Superfund Preliminary Site Assessment (PSA) was completed in 1995.

In 2018 the Division of Materials Management investigated this landfill as part of its Inactive Landfill Initiative. Three newly installed groundwater monitoring wells were sampled. There were no exceedences of State groundwater quality standards for any chlorinated volatile organic chemicals. PFOS was detected at 36 ppt at an upgradient well and 2.5 ppt at one of the downgradient wells. PFOA results were similar in all wells ranging from 3.1 to 6.9 ppt. The Health Advisory level established by USEPA for PFOA, PFOS or the 2 compounds combined is 70 ppt. PFHxS was detected in the two downgradient wells at 20 and 36 ppt.

CONFIRMED HAZARDOUS WASTE DISPOSED:
None reported

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:
There is no documentation that hazardous wastes were ever disposed of at the site.

ASSESSMENT OF HEALTH PROBLEMS:
None provided

41

HAZARDOUS MATERIAL SPILLS INFORMATION REQUEST

GABRESKI RUNWAY
S. PERIMETER ROADWESTHAMPTON, NY 11978Spill Number: 1807188Close Date:

ADDRESS CHANGE INFORMATION
Revised street: SUFFOLK CNTY AIRPORT GABRESKI
Revised zip code: NO CHANGE

Source of Spill: INSTITUTIONAL, EDUC, GOV, OTHERSpiller: UNKNOWNSpiller Phone:
Notifier Type: Local AgencyNotifier Name:
Caller Name: Caller Agency:Notifier Phone:
DEC Investigator: DJCHUISAContact for more spill info: JAMES RYANContact Person Phone: (631) 852-8095

Category: Known release which created a fire/explosion hazards (inside or outdoors), drinking water supply contamination, or significant releases to surface waters.
Class: Unable or Unwilling RP – DEC Field Response – DEC Corrective Action Required

Spill Date	Date Cleanup Ceased	Cause of Spill	Meets Cleanup Standards	Penalty Recommended		
09/27/2018		OTHER	NO	NO		
Material Spilled	Material Class	Quantity Spilled	Units	Quantity Recovered	Units	Resource(s) Affected
PERFLUOROOCTANE SULFONIC ACID	HAZARDOUS MATERIAL	0.00	UNKNOWN	0.00	UNKNOWN	GROUNDWATER SURFACE WATER

Caller Remarks: NO REMARKS GIVEN FOR THIS SPILL

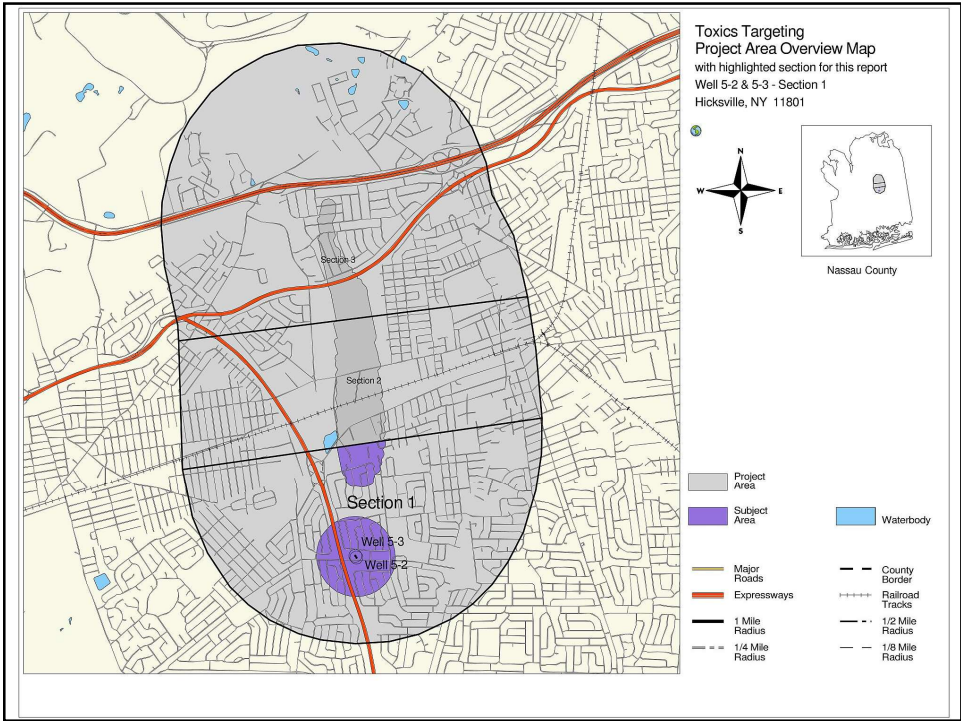
DEC Investigator Remarks: NO DEC INVESTIGATOR REMARKS GIVEN FOR THIS SPILL.

42

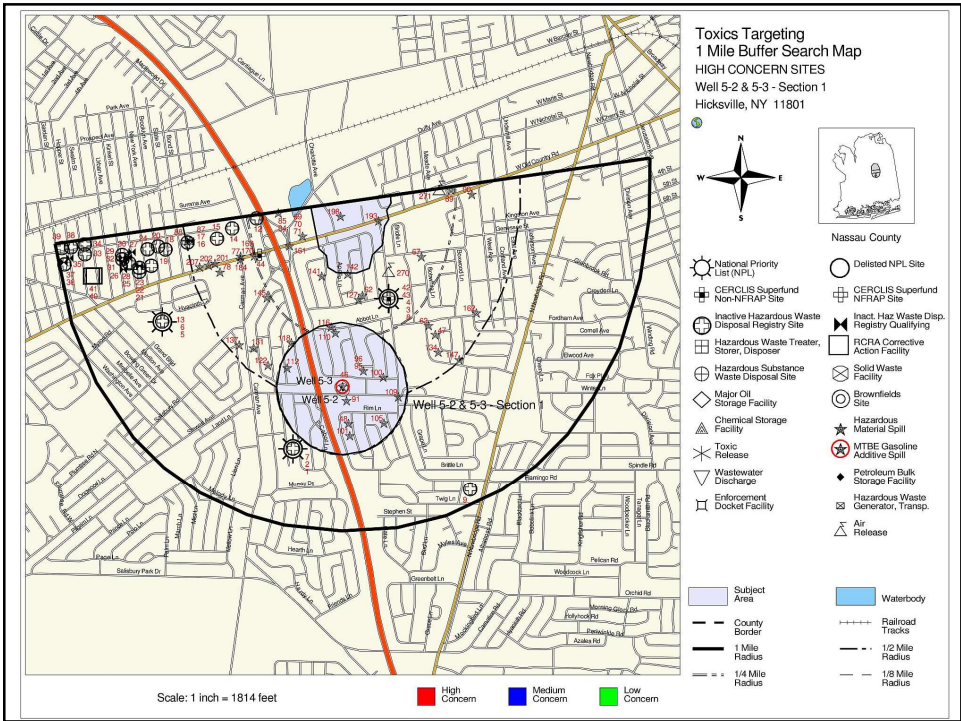
Please consider the environment before printing.



Please consider the environment before printing.



45



46

Please consider the
environment before printing.

A Cost Recovery Program: PFAS Water Contamination

October 22, 2020

**NATIONAL PRIORITY LIST (NPL) INFORMATION REQUEST**

Identification Number 1 **NEW CASSEL/HICKSVILLE GROUND WATER CONTAMINATION** **EPA Facility Id: NY0001095363**
SOUTHERN END OF IRIS PLACE NEW CASSEL/HICKSVILLE, NY 11590

ADDRESS CHANGE INFORMATION
Revised street: NO CHANGE
Revised zip code: UNKNOWN

.....

New Cassel and Hicksville Ground Water Contamination
New York
EPA ID#: NY0001095363
EPA REGION 2
Congressional District(s): 04
Nassau County - Southern end of Iris Place

NPL LISTING HISTORY
Proposed Date: 3/10/2011
Final Date: 9/16/2011

Site Description
EPA listed the New Cassel/Hicksville Ground Water Contamination Site (Site) on the National Priorities List (NPL) of sites eligible for long-term remedial action financed under the Comprehensive Environmental Response, Compensation, and Liability Act, more commonly known as Superfund, on September 16, 2011. The Site is considered to be an area of widespread groundwater contamination within the Towns of North Hempstead, Hempstead and Oyster Bay in Nassau County, New York.

In 2010, EPA collected groundwater samples from raw (pre-treated) water from multiple public supply wells (PSWs) in central Nassau County and analyzed the raw water samples to determine whether volatile organic compounds (VOCs) were present above the Maximum Contaminant Level (MCL). VOCs are contaminants that evaporate easily into the air and dissolve in water. The MCL is a Federal standard for drinking water quality that is a legal threshold limit on the amount of a substance that is allowed in public water systems under the Safe Drinking Water Act. EPA's 2010 analytical results determined that there were VOCs above the MCL in the raw water in four Town of Hempstead wells (Bowling Green 1 and 2, Roosevelt Field 10, and Levittown 2A), six Hicksville wells (4-2, 5-2, 5-3, 8-1, 8-3, and 9-3) and Westbury Water District Well 11.

Threat and Contaminants
The primary contaminants of concern for the Site are tetrachloroethylene (PCE), trichloroethylene (TCE) and other VOCs. VOCs are often used as ingredients in paints, solvents, aerosol sprays, cleaners, disinfectants, automotive products and dry cleaning fluids. While no individual sources were identified in EPA's March 2011 Hazard Ranking System listing package for inclusion on the NPL, it is believed that past industrial and commercial activities in the area may have contributed

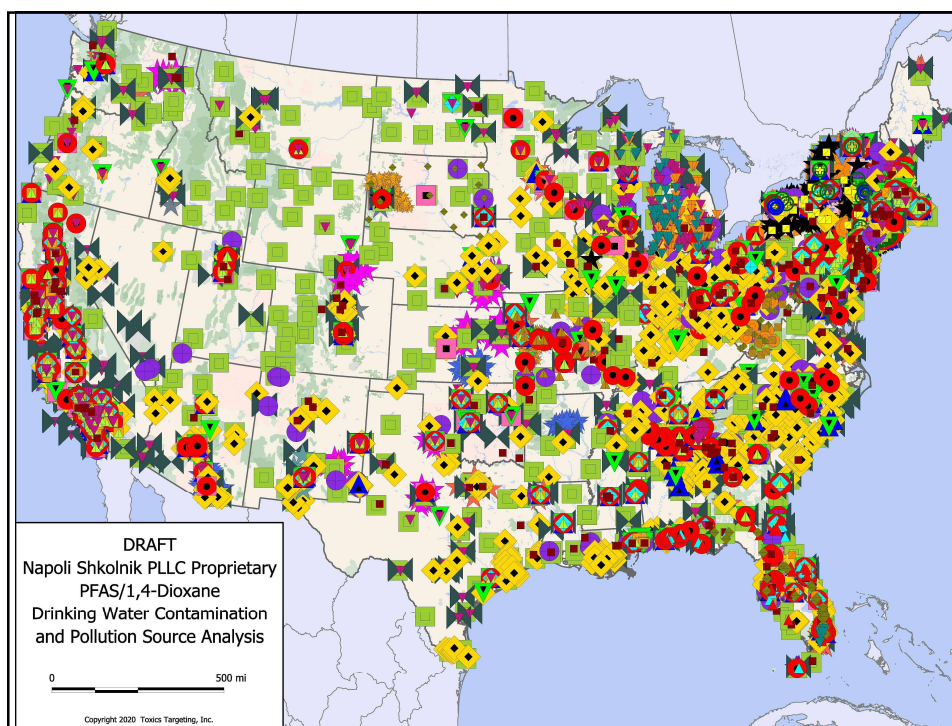
47

Copyright 2019 Toxics Targeting, Inc. April 01, 2019 Information Request Page 2

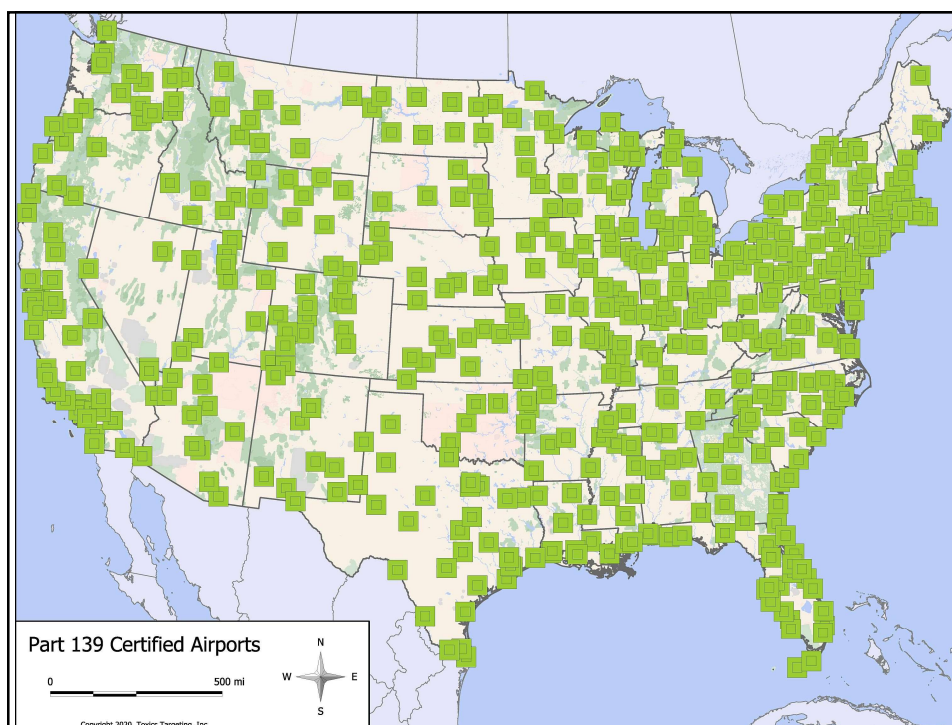
WESTBURY, NY 11590		
NAME: ALL-SHIELD ELECTRONICS	Owner Type:	Corporate or Commercial
ADDRESS: 45 BOND STREET		
WESTBURY, NY 11590		
NAME: Sew Simple	Owner Type:	Corporate or Commercial
ADDRESS: 710 SUMMA AVENUE		
WESTBURY, NY 11590		
NAME: APPLIED FLUIDS	Owner Type:	Corporate or Commercial
ADDRESS: 770 MAIN STREET		
WESTBURY, NY 11590		
NAME: ARKWIN INDUSTRIES, INC.	Owner Type:	Corporate or Commercial
ADDRESS: 686 MAIN STREET		
WESTBURY, NY 11590		
NAME: ATLAS GRAPHICS INC.	Owner Type:	Corporate or Commercial
ADDRESS: 567 MAIN STREET		
WESTBURY, NY 11590		
NAME: DBA LONG ISLAND SPRAY & FINISHING	Owner Type:	Corporate or Commercial
ADDRESS: 121 HOPPER STREET		
WESTBURY, NY 11590		
NAME: BERNITE PRODUCTS INC	Owner Type:	Corporate or Commercial
ADDRESS: 84 NEW YORK AVENUE		
WESTBURY, NY 11590		
NAME: BILT-RITE STEEL BUCK CORP.	Owner Type:	Corporate or Commercial
ADDRESS: 95 HOPPER STREET		
WESTBURY, NY 11590		
NAME: CUSTOM COATING INC.	Owner Type:	Corporate or Commercial
ADDRESS: 36 NEW YORK AVENUE		
WESTBURY, NY 11590		
NAME: NUTRA TEC CORPORATION	Owner Type:	Corporate or Commercial
ADDRESS: 72 SYLVESTER STREET		
WESTBURY, NY 11590		
NAME: EFFICIENCY SYSTEMS	Owner Type:	Corporate or Commercial
ADDRESS: 45 URRAN AVENUE		
WESTBURY, NY 11590		
NAME: HURON TOOL AND CUTTING	Owner Type:	Corporate or Commercial

48

Please consider the environment before printing.

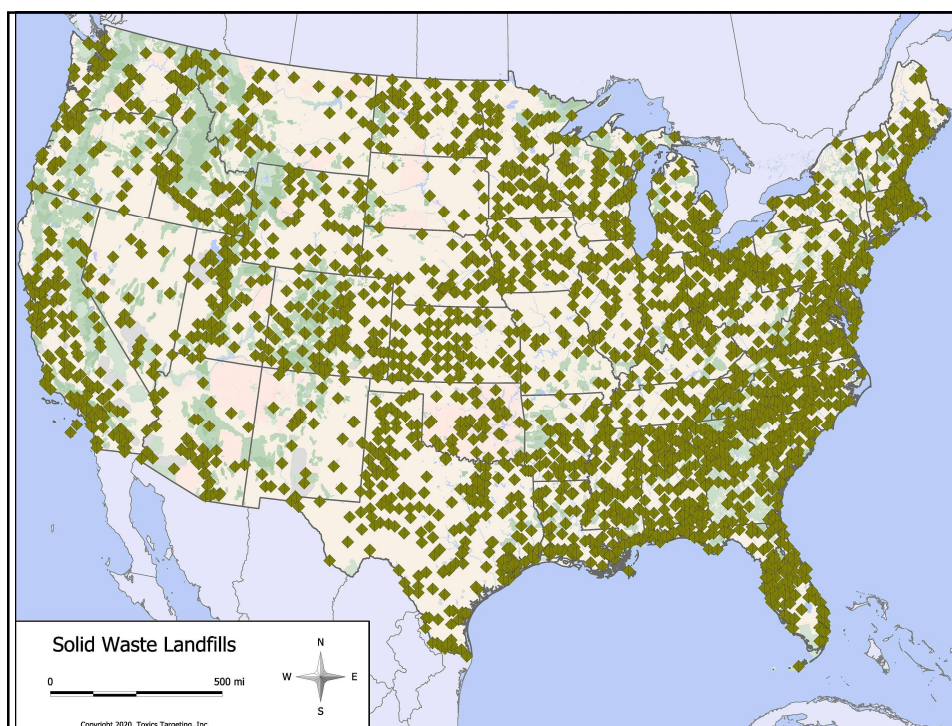


49

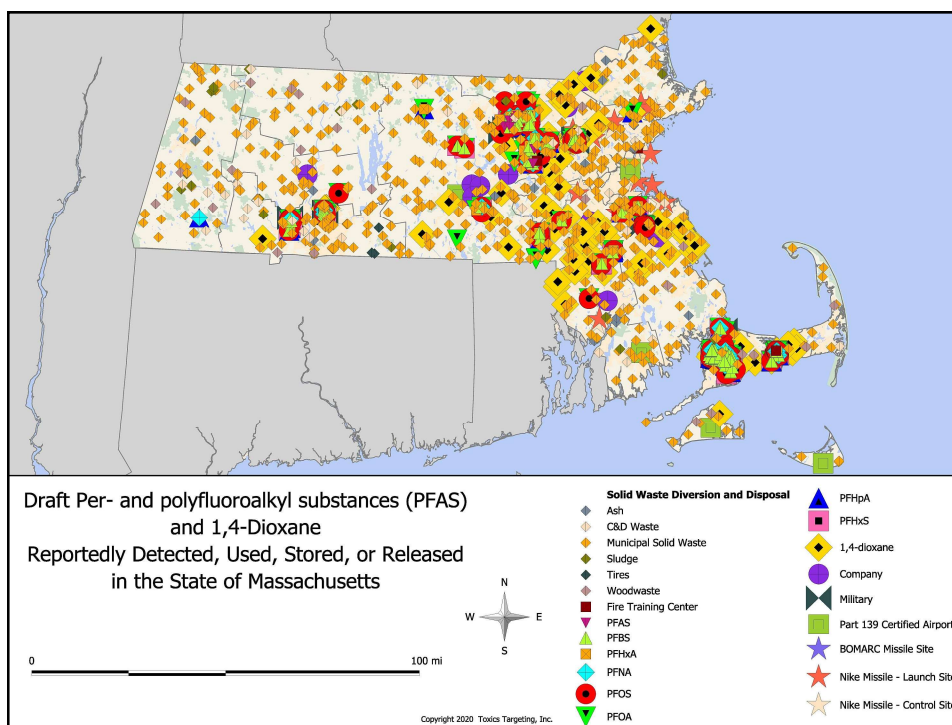


50

Please consider the
environment before printing.

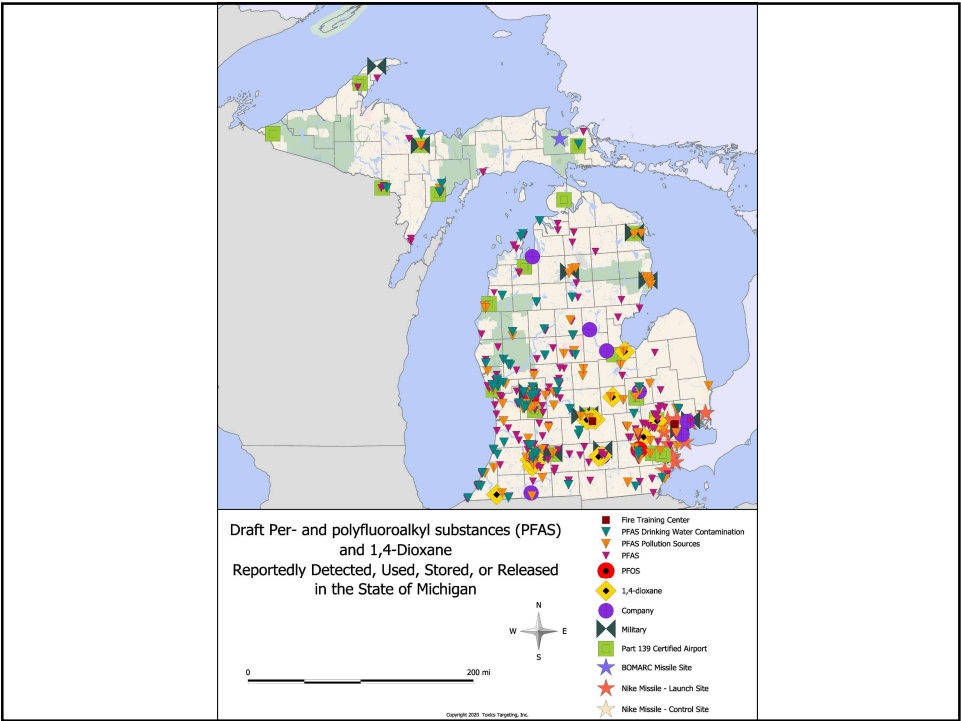


51

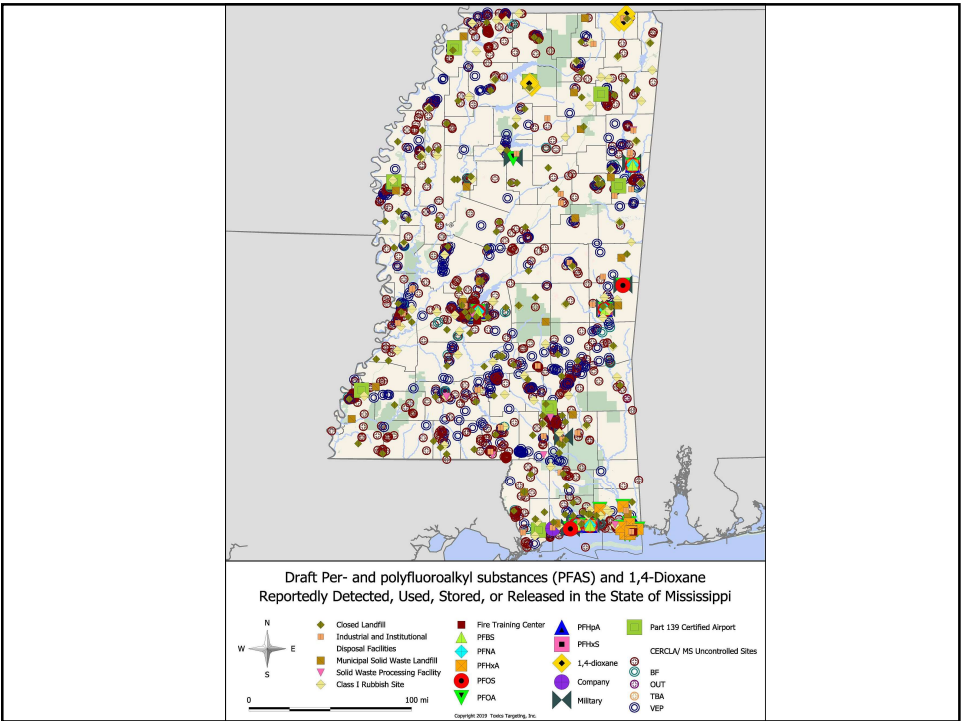


52

Please consider the
environment before printing.

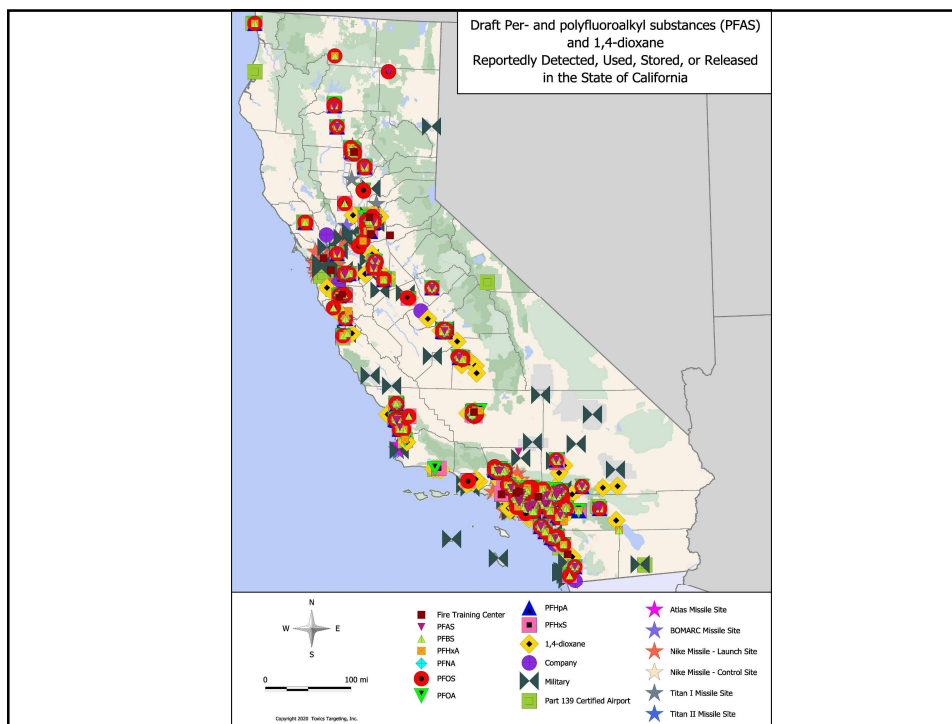


53



54

Please consider the
environment before printing.



55

ASK THE EXPERTS



Hank Naughton
Partner
Napoli Shkolnik
PLLC



Paul Napoli
Of Counsel
Napoli Shkolnik
PLLC



Michelle Greene
Associate
Napoli Shkolnik
PLLC



Walter Hang
CEO
Toxics Targeting, Inc.

Enter your **questions** into the **question pane** at the lower right-hand side of the screen.
Please specify to whom you are addressing the question.



56

56

Please consider the
environment before printing.

THANK YOU FOR JOINING TODAY'S WEBINAR



**NAPOLI
SHKOLNIK PLLC**
ATTORNEYS AT LAW

**WORKING TO FIGHT
WATER CONTAMINATION**

As part of your registration, you are entitled to an additional 30-day archive access of today's program.

Until next time, keep the water safe and secure.

57

57

Presenter Biography Information

- **Hank Naughton** - Mr. Naughton served 26 years as a member of the MA House of Representatives where water quality, purity and the protection of watersheds was always a high priority. His father worked for the hometown water department for over 40 years. This personal connection to the water industry only strengthens Hank's resolve to advocate for clean water nationwide.
- **Paul Napoli** - Mr. Napoli has litigated extensively on behalf of municipal clients for contamination to land and water supplies resulting from petroleum and related chemical spills. He led the team who obtained more than \$50 million for environmental contamination of municipal water supplies by leaks of petroleum additive.
- **Michelle Greene** - Ms. Greene is an environmental associate who focuses her practice on representing individuals, communities and municipalities experiencing water contamination. She is involved in complex high-profile class action and mass tort cases, and speaks on PFAS contamination issues across the country. Reed Barton is an Associate and environmental engineer with CDM Smith. He has 15 years of experience focused on the planning, design, and construction of water treatment and conveyance infrastructure. Reed obtained a BS in Integrated Science from James Madison University and a MS in Environmental Engineering from Virginia Tech and is a licensed professional engineer in multiple states. Reed's expertise includes addressing emerging contaminants in public drinking water systems, and in recent years he has assisted a number of public water systems with addressing PFAS contamination in their drinking water. This work has included pilot studies to evaluate the performance of GAC, Ion Exchange, Membranes, Ultraviolet Advanced Oxidation, and Foam Fractionation for the removal of PFAS. He served on the leadership team for the planning and design of the 48-mgd expansion of the Northwest Water Treatment Plant in Brunswick County, North Carolina; which includes a new 41-MGD Reverse Osmosis (RO) treatment facility to remove high levels of PFAS compounds. When construction is completed, the Northwest WTP membrane facility will be the largest membrane application for advanced PFAS removal and the third largest RO membrane facility in the U.S.
- **Walter Hang** - Mr. Hang oversees his team of scientists, researchers and analysts who obtain environmental data from local, state, and federal government sources to provide a comprehensive report regarding toxic sites, possible contamination sources and related health hazards.

58

58

Please consider the
environment before printing.

CE Credits (CEUs) and Professional Development Hours (PDHs)

AWWA awards webinar attendees CEUs.

If you viewed this webinar live, you will receive a certificate through the AWWA account associated with the email address you used to register.

If you viewed this webinar through a group registration, contact your proctor to log your participation.

If you viewed this as an archive webinar, follow the directions included in your archive webinar email to log your participation.

Certificates will be available on your AWWA account within 30 days of the webinar

59

59

How to Print Your Certificate of Completion

Within 30 days of the webinar, login to **www.awwa.org** or register on the website. If you are having problems, please email educationservices@awwa.org

Once logged in, go to:

- My Account (click on your name in the top right corner)
- My Transcripts
 - To print your official transcript, click **Print list**
 - To print individual certificates, click **Download Certificate**

60

60

Please consider the
environment before printing.