

**Assessment of Public Comment
Comments Received on Part 597 Proposed Rule Making**

Comment Period: May 12, 2016 – July 8, 2016

Below are the New York State Department of Environmental Conservation’s (DEC) responses to comments submitted by the public regarding the adoption of amendments to 6 NYCRR Part 597. This rule making was proposed on April 25, 2016 and included a 58 day comment period that ended on July 8, 2016. Public hearings were held in June 2016 in Albany, Rochester and Garden City, for a total of three public hearings, with an information session prior to each hearing. DEC received 40 comments during the hearings and from written submissions. Oral comments were received at the Albany and Garden City hearings, but none were provided during the Rochester hearing.

In this document, ‘PFOA/PFOS’ collectively means: perfluorooctanoic acid (PFOA-acid, Chemical Abstracts Service (CAS) No. 335-67-1), ammonium perfluorooctanoate (PFOA-salt, CAS No. 3825-26-1), perfluorooctane sulfonic acid (PFOS-acid, CAS No. 1763-23-1), and perfluorooctane sulfonate (PFOS-salt, CAS No. 2795-39-3).

Commenter	Specific Comments	Response
1	1- DEC should not allow entities to use firefighting foam with hazardous substances for an additional year since alternatives are readily available. Commenter suggests that three months would be a better time period.	Response 1-1: Balancing the risks posed by PFOA/PFOS against the risks posed by fires in support of our mission to protect public health and the environment, DEC is allowing the use of firefighting foams that may contain PFOA/PFOS to fight fires that occur on or before April 25, 2017. DEC recognizes that facilities that possess supplies of firefighting foam need time to determine if their existing supplies of foam contain one or more of these newly listed hazardous substances and to make arrangements to dispose of and replace firefighting foam that contains PFOA/PFOS where the concentration of PFOA/PFOS is such that the foam cannot be used without causing a reportable spill (one pound of PFOA or PFOS). Allowing facilities that possess firefighting foam to continue to use foams that may contain PFOA/PFOS on a limited basis to fight fires furthers protection of public health and safety. DEC is not allowing use of firefighting foam that would result in a reportable spill of PFOA/PFOS for other purposes such as training. If firefighting foam containing PFOA/PFOS is used to fight a fire and there is a release of one pound or more of a hazardous substance, the release needs to be reported to DEC’s spill hotline to allow DEC to determine if remediation of the release is necessary. DEC believes this is an appropriate approach that allows for the protection of the public and the environment.
1	2- DEC should require immediate reporting of stored hazardous substances to the State and require tanks to be in compliance with all storage and handling requirements immediately instead of	Response 1-2: DEC requires that facilities that store PFOA/PFOS in tanks register the facility with DEC immediately. Under 6 NYCRR § 598.1(h), these facilities have two years to come into compliance with the tank and container standards. DEC is attempting to gather information on the uses of PFOA/PFOS throughout the State by requesting information from industry and other parties.

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	within two years. Entities that have, may have, or may sell PFOA/PFOS should be required to immediately provide an accounting of the substances to DEC.	
1	3- DEC should pursue additional regulatory authority for the PFOA/PFOS contaminants to be treated as hazardous waste. DEC should begin a rule making process to regulate PFOA, PFOS, and related chemicals as hazardous wastes under 6 NYCRR Part 371.4. This would address the proper disposal of PFOA, PFOS, and related chemicals.	Response 1-3: The comment goes beyond the scope of this rule making. DEC may consider this issue in a future rule making.
1	4- DEC should regulate PFOA, PFOS, and related chemicals under the State’s Clean Water Act authority, including the regulations found at 6 NYCRR Part 750. Discharges should be reportable under the State Pollutant Discharge Elimination System permitting system with effluent limitations established at non-detect levels.	Response 1-4: The comment goes beyond the scope of this rule making. DEC may consider this issue in a future rule making.
1	5-DEC should establish air quality permit requirements for PFOA, PFOS, and related chemicals, with a reportable limit of 0 pounds.	Response 1-5: The comment goes beyond the scope of this rule making. DEC may consider this issue in a future rule making.
2	1- Companies that contaminated properties with PFOA and PFOS should be required to pay for the cleanup.	Response 2-1: As DEC becomes aware of contaminated properties, DEC will evaluate appropriate response and remediation for these properties in the same manner that DEC addresses any other property that is contaminated by a hazardous substance. Companies that contaminate properties are among the parties responsible for costs associated with remediation.

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3	1 – Commenter believes that information shows that PFOA and PFOS meet the criteria for inclusion on the list of hazardous substances and that adding PFOA/PFOS to the list will assist communities by clarifying the steps that must be taken to protect human health and the environment.	Response 3-1: Comment noted.
3	2 – Commenter suggests DEC set a drinking water maximum contaminant level for PFOA/PFOS.	Response 3-2: The comment goes beyond the scope of this rule making and DEC authority.
3	3 – Commenter suggests that DEC require public water supplies be tested for the presence of PFOA/PFOS.	Response 3-3: The comment goes beyond the scope of this rule making and DEC authority.
4	1 – Commenter expressed concern about economic and financial impacts on fire departments, fire districts, and municipalities which must determine whether firefighting foams contain PFOA/PFOS, and dispose and replace PFOA/PFOS foams.	Response 4-1: DEC understands the concern regarding costs to fire departments of determining whether foams contain PFOA/PFOS in concentrations such that the foams cannot be used without causing a reportable spill (one pound of PFOA or PFOS) and the costs of disposing and replacing foams. Recognizing the potential cost, the regulation allows for the use of such foam to fight fires until April 25, 2017, a year after the emergency rule went into effect. DEC has been working with the Fire Fighting Foam Coalition and the manufacturers of firefighting foam to make available information on foams that may contain PFOA/PFOS. In addition, DEC has posted a fact sheet on firefighting foam on DEC’s website (see http://www.dec.ny.gov/regulations/106078.html). DEC believes the information in the fact sheet will minimize costs to fire departments in determining whether foams contain PFOA/PFOS and disposing of foams that contain PFOA/PFOS where the concentration of PFOA/PFOS is such that the foam cannot be used without causing a reportable spill (one pound of PFOA or PFOS). DEC is unable to provide assistance with costs associated with replacement of firefighting foam.
4	2 – Commenter expressed confusion as to whether the regulatory requirement is to report the use of one pound of foam or one pound of the listed chemicals.	Response 4-2: The requirement is to report the use of one pound of the listed chemicals. See also Response 4-1 for discussion of determining whether one pound of the listed chemicals has been released (i.e., whether a reportable spill has occurred).
4	3 – Commenter requests clarification regarding who will be responsible for the	Response 4-3: DEC will evaluate on a case-by-case basis the need for remediation of any release of PFOA/PFOS and who will be liable for cleanup costs.

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	cost of cleanup of foam used for fire extinguishment.	
5	1 – Commenter noted her support for the regulation of the use of PFOA and any of its derivatives.	Response 5-1: Comment noted.
6	1 – Commenter noted her organization’s support for adopting this rule.	Response 6-1: Comment noted.
6	2 - DEC should continue to collaborate with the New York State Department of Health (DOH), the New York State Department of State (DOS), and local governments to conduct communication campaigns to raise awareness about the effects of PFOA and PFOS.	Response 6-2: The comment goes beyond the scope of this rule making. However, DEC has provided and will continue to provide information to interested parties regarding DEC’s efforts to address these issues.
6	3- DEC should seek to equip local environmental organizations, local governments, educational institutions, and citizens with the tools necessary to report, map, and visualize instances of contamination.	Response 6-3: The comment goes beyond the scope of this rule making. However, DEC has provided and will continue to provide information to interested parties regarding DEC’s efforts to address these issues.
6	4- DEC should continually verify the status of the U.S. Environmental Protection Agency's (EPA) progress on its voluntary PFOA Stewardship Program and communicate the results to the public.	Response 6-4: The comment goes beyond the scope of this rule making. EPA developed and administers the voluntary PFOA Stewardship Program. Information about this program is available on EPA’s website at https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/and-polyfluoroalkyl-substances-pfass-under-tsca#tab-3 .
6	5- DEC should use data from registered facilities storing PFOA and PFOS, in addition to available water testing results, to expand the testing of community water systems to determine what localities may be at risk and identify and work with DOH to remediate sources of contamination.	Response 6-5: The comment goes beyond the scope of this rule making. However, DEC will provide information on registered facilities storing PFOA/PFOS to DOH to allow it to consider expanded testing of drinking water supplies. DEC is investigating whether other localities may be at risk and will pursue investigation and remediation of these areas as appropriate.

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7	1 - Commenter requested that all fluorinated chemicals be included on the list of hazardous substances noting that even the newer C6 compounds may cause problems similar to those of PFOA/PFOS compounds.	Response 7-1: The comment goes beyond the scope of this rule making. DEC may consider this issue in a future rule making.
8	1 – Commenter (a manufacturer of firefighting foam) supports adding PFOA/PFOS to the list of hazardous substances and noted that fluorine-free firefighting foams are now being developed.	Response 8-1: Comment noted.
8	2 – Commenter encourages DEC to confirm with fluorochemical producers, in writing, their compliance with EPA’s 2010/2015 PFOA Stewardship Program.	Response 8-2: See Response 6-4.
9	1 – Commenter alleges that human exposures to PFOA and PFOS in the United States are declining and are low compared to historical occupational exposure levels and doses used in laboratory animal studies.	<p>Response 9-1: Whether this allegation is true or not is irrelevant to whether PFOA and PFOS meet the criteria for being considered a hazardous substance in accordance with 6 NYCRR § 597.2(a)(1) which states:</p> <p style="padding-left: 40px;"><i>“A substance is considered hazardous and will be included on the list provided under section 597.3 of this Part if the substance meets any of the following criteria:</i></p> <p style="padding-left: 80px;"><i>(1) because of its quantity, concentration, or physical, chemical or infectious characteristics, the substance causes physical injury or illness to humans when improperly treated, stored, transported, disposed of, or otherwise managed;”</i></p> <p>The regulation does not limit the list of hazardous substances to only those substances where human exposure levels are high, rising or stable and it does not establish an exposure level threshold. The purpose of the Chemical Bulk Storage program is to prevent the contamination of land, water and air by releases of hazardous substances from active and/or abandoned storage facilities since contaminated resources cannot always be completely restored.</p>

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<p>9</p>	<p>2 - Commenter alleges that human epidemiologic studies do not demonstrate that occupational or environmental exposures to PFOA or PFOS cause human health effects.</p>	<p>Response 9-2: The toxicity of PFOA and PFOS and their salts has been reviewed and summarized by numerous authoritative bodies such as the Agency for Toxic Substances and Disease Registry (ATSDR), European Food Safety Authority (EFSA), Health Canada (HC), Organization for Economic Co-operation and Development (OECD), Environment Canada/Health Canada (EC/HC), and the U.S. Environmental Protection Agency (EPA).</p> <p>Human studies show associations between increased PFOA exposure and an increased risk for several human health effects, including effects on the liver, immune system, thyroid gland, cholesterol levels, pre-eclampsia (a complication of pregnancy that includes high blood pressure), and kidney and testicular cancer. Similarly, human studies show associations between increased PFOS exposure and an increased risk for several human health effects, including increases in total serum cholesterol, triglycerides, and uric acid in the general population.</p> <p>Several studies have investigated associations between serum PFOA or PFOS levels measured in general-population biomonitoring surveys (e.g., NHANES¹) and risk factors or biomarkers for various human health outcomes (reviewed and summarized by ATSDR in 2015 and EPA in 2016). Positive associations with increasing PFOA or PFOS serum levels have been observed with serum lipids, high blood pressure, liver enzymes, kidney-function markers, body-mass index, and reduced birth weight. The consistency of results across these largely cross-sectional studies varies among different health outcomes. Nevertheless, the results of these studies suggest that, even at background exposure levels, increased PFOA or PFOS serum concentrations can be significantly associated with several human health outcome markers.</p> <p>¹ http://www.cdc.gov/nchs/nhanes/</p>
<p>9</p>	<p>3 - Commenter alleges that animal toxicology studies conducted at high doses do not prove harm to human health.</p>	<p>Response 9-3: Laboratory animal studies support human hazard identification, particularly when health endpoints associated with human exposures in epidemiological studies are also observed in exposed animals. EPA PFOA & PFOS Drinking Water Health Advisories Fact Sheet dated May 2016 states:</p> <p><i>“EPA’s health advisories are based on the best available peer-reviewed studies of the effects of PFOA and PFOS on laboratory animals (rats and mice) and were also informed by epidemiological studies of human populations that have been exposed to perfluoroalkyl substances (PFASs). These studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses</i></p>

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9	4 - Commenter stated that DOH did not conclude that exposure to PFOA or PFOS causes physical injury or illness to humans. Therefore PFOA and PFOS should not be classified by DEC as hazardous substances.	Response 9-4: In the April 20, 2016 DOH letter from Commissioner Zucker to (then acting) Commissioner Seggos, DOH stated that “There is substantial concern across the globe regarding the human toxicity of PFOA and PFOS” and that comprehensive evaluations of human health effects of these chemicals have shown “an increased risk for several adverse health effects in humans.” Based on the totality of the available evidence, DOH concluded that, overall, the combined weight of evidence from human and experimental animal studies indicates that prolonged exposure to significantly elevated levels of PFOA or PFOS can negatively affect human health. Moreover, subsequent to the April 20, 2016 letter, EPA released updated editions of their Health Effects Support Documents in support of the lifetime health advisories issued by EPA in May 2016 for PFOA and PFOS. All of these summaries identify important studies on the health effects associated with exposure to these chemicals, including studies on chronic, developmental, and reproductive effects observed in humans and animals, and provide additional support for listing PFOA/PFOS as hazardous substances.

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		<p>Since the proposed amendments to Part 597 were adopted under the Emergency Rule on April 25, 2016, the National Toxicology Program issued a draft report (NTP, 2016) based on 153 relevant studies “to evaluate the evidence on exposure to PFOS or PFOA and immune-related health effects to determine whether exposure to either chemical is associated with immunotoxicity for humans.” The NTP report finds that [t]he evidence indicating that PFOA affects multiple aspects of the immune system supports the overall conclusion that PFOA alters immune function in humans” and that “[t]he evidence indicating PFOS suppresses multiple aspects of the immune system supports the overall conclusion that PFOS alters immune function in humans.” The report concludes that both PFOA and PFOS are “presumed to be an immune hazard to humans.” Presumed hazards are one step below known hazards and one step above suspected hazards on the five-step scale NTP uses for hazard identification.</p> <p>Based on the review of human epidemiology and animal toxicology data for PFOA and PFOS, and DOH’s conclusions that significantly elevated exposure to PFOA or PFOS can affect human health, DEC disagrees with the comments that human and animal evidence of PFOA or PFOS health effects do not support the proposed listing of PFOS and PFOA as hazardous substances.</p> <p>In addition, PFOA/PFOS pose a threat to the environment by impacting the survival rate of fish when exposed to these substances.</p>
10	1- Commenter commended DEC on the proposed regulation.	Response 10-1: Comment noted.
10	2 – Commenter suggested that more must be done by DEC and DOH to make sure unregulated chemicals become regulated by New York State and are not released into the environment.	Response 10-2: The comment goes beyond the scope of this rule making. As DEC becomes aware of unregulated chemicals of concern, DEC will evaluate each such chemical to determine whether it is appropriate to classify it as a hazardous substance.
10	3- Commenter recommends that DEC and DOH work together to test water statewide for PFOA and PFOS.	Response 10-3: The comment goes beyond the scope of this rule making. See Response 6-5.
10	4- Commenter urges the State to hold legislative hearings on New York State’s water quality.	Response 10-4: The comment goes beyond the scope of this rule making. Legislative hearings were held to address New York State’s water quality.

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11	1- Commenter supports proposed regulation as a step in the right direction.	Response 11-1: Comment noted.
11	2- Remediation is needed for sites that are contaminated.	Response 11-2: See Response 2-1.
11	3- Emerging chemicals must be proactively regulated and regularly tested for in municipal water systems and private wells.	Response 11-3: The comment goes beyond the scope of this rule making. See Response 6-5.
11	4 – Residents deserve hearings to find out why it took close to 18 months for State and local government to let people know that their water was contaminated.	Response 11-4: See Response 10-4.
12	1 – State or federal entities should require the manufacturers of PFOA to monitor the water, soil, and air within each of the communities where they do business, regardless of the size of the community.	Response 12-1: The comment goes beyond the scope of this rule making.
12	2 - In order to avoid future issues, chemicals that companies are now using in place of PFOA and any potential health risks associated with such chemicals must be identified.	Response 12-2: See Response 10-2.
12	3 - Commenter demands hearings as to why a situation like Hoosick Falls was able to happen.	Response 12-3: See Response 10-4.
12	4 - Government should protect its citizens from the onslaught of these kinds of pollution.	Response 12-4: See Response 12-2.
12	5 – Changes in legislation are needed regarding how New York State is going to address the chemicals in the future.	Response 12-5: See Response 12-2.

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12	6 – Commenter asked why PFOA was not regulated sooner.	Response 12-6: See Response 12-2.
13	1 - Commenter provided general information about operations on Long Island and noted the following: Foam is expensive and is not used for training purposes. No fire department is storing foam concentrate in storage tanks. Only 5 gallon containers are being stored. A review of the foams used by some of the fire departments indicate that they do not contain the chemicals being listed though some chemicals are listed as proprietary so it is unknown. For foams that may contain these chemicals in low concentrations, the manufacturer indicated that over 120,000 gallons would have to be used in order to reach the one pound reportable quantity. It appears that these foams are safe to use. Further review of foams at fire departments will be conducted, and if these chemicals are present, the foams will be disposed of and replaced.	Response 13-1: Comment noted.

Commenters

- 1 – Riverkeeper: John Parker; Environmental Advocates of New York: Elizabeth Moran
- 2 – Jim Prendergast (citizen)
- 3 – Hoosick Falls: Mayor David Borge
- 4 – NYSAFC: Jerry DeLuca
- 5 – Catherine Dawson (citizen)
- 6 – OCCA: Vicky M. Lentz

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- 7 – John Sexton (citizen)
- 8 – Solberg (Foam) Company: Steve Hansen, Mitch Hubert
- 9 – Exponent: Ellen Chang
- 10 – Albany hearing: Elizabeth Moran, Environmental Advocates of New York
- 11 – Albany hearing: Jennifer Plouffe, resident of Hoosick Falls
- 12 – Albany hearing: Desiray Rice on behalf of Constance Plouffe, resident of Petersburg
- 13 – Garden City hearing: Owen Magee, representing Fire and HazMat departments