1. EFFECT OF RULE

This rule:

- Adds 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) (also collectively referred to within as PFOA and PFOS) to 6 NYCRR Section 597.3 (Section 597.3);
- Allows continued use of firefighting foam that may contain PFOA or PFOS to fight fires (but not for training or any other purposes) on or before April 25, 2017 even if such use may result in the release of a reportable quantity (RQ), which is otherwise prohibited; and
- Corrects the list of hazardous substances by providing units for RQs.

This rule applies statewide in all 62 counties of New York State (State). In total, there are over 1,400 registered facilities in the New York State Department of Environmental Conservation’s (Department) Chemical Bulk Storage (CBS) database. These facilities, the great majority of which would likely be categorized as small businesses, store a wide variety of hazardous substances. Local governments have registered over 580 CBS facilities.

The Department does not collect data with respect to the number of persons employed by the owner or operator of any subject CBS facility or on the industrial classification of a registered facility, and the Department is still in the process of collecting and analyzing data regarding the use and storage of PFOA and PFOS in the State. Entities that use or store PFOA or PFOS are expected to be most affected by this rule.
Therefore, the Department is presently unable to estimate how many small businesses and local governments will be newly subject to regulation as a result of this rule, or to identify the size of businesses that are or may be affected by the rule. The Department believes that the types of facilities currently registered by local governments are water and wastewater treatment facilities, which would not be expected to use or store PFOA or PFOS. The Department is aware of approximately 1,800 local government agencies (fire departments) that may maintain stocks of firefighting foam which could be subject to the registration requirement. Although the rule applies to all small businesses and local governments in the State, the number of facilities that would be required to register as a CBS facility or report a release of a hazardous substance as a result of this rule making is expected to be small.

Beyond any costs associated with complying with this rule making, regulated entities such as small businesses and local governments may be subject to the regulatory requirements of 6 NYCRR Part 375 (Part 375) due to PFOA or PFOS contamination where these hazardous substances have been released into the environment. Under Part 375, the Department is authorized to pursue clean-up of hazardous substances including those listed in Section 597.3. It is not known how many small businesses or local governments own properties that will be subject to the regulatory requirements of Part 375 due to contamination from PFOA or PFOS.

2. COMPLIANCE REQUIREMENTS

This rule makes no changes to reporting, recordkeeping, or other compliance requirements for CBS facilities other than to place PFOA and PFOS on the list of hazardous substances in Section 597.3. This rule requires that CBS facilities storing PFOA or PFOS: register each facility with one or more regulated storage tanks that store listed hazardous substances, display the registration certificate issued by the Department, maintain appropriate storage tank systems as explained in 6 NYCRR Parts 598 and 599, complete annual spill prevention reports, and inspect storage equipment every five years.
6 NYCRR Part 597 prohibits releases of an RQ of a hazardous substance. As a result of this rule, any release of an RQ of PFOA or PFOS is required to be reported to the Department’s Spill Hotline.

3. PROFESSIONAL SERVICES

No new or additional professional services would likely be needed for small businesses or local governments to comply with this rule if they discontinue using and storing PFOA and PFOS before April 25, 2018. Small businesses and local governments that continue to store PFOA or PFOS after April 25, 2018, when the storage and handling standards go into effect for existing facilities, may need professional services to assist them in meeting the handling and storage requirements for hazardous substances. Professional services that may be needed for compliance with this rule could include professional engineers or qualified environmental professionals to complete annual spill prevention reports and inspection of storage equipment.

If a small business or local government becomes a remedial party subject to requirements to implement a remedial program under Part 375, as described above, it would likely require consulting and contractual services to assist in carrying out the remedial program. This could include professional engineers or qualified environmental professionals as defined in Part 375 and contractual services needed to undertake site investigation field work, analyses of environmental samples, or other specialized services.

4. COMPLIANCE COSTS

Under the federal Toxic Substances Control Act, the United States Environmental Protection Agency (USEPA) completed a significant new use rule (SNUR) to limit the production and importation of PFOS-related substances in 2002. USEPA worked with industry to voluntarily phase out the use of PFOA-related substances by December 2015, and proposed a SNUR to limit the production and importation of PFOA-related substances in anticipation of the phase-out deadline (80 FR 2885; January 21, 2015). Since production and importation of
PFOA- and PFOS-related substances have been restricted, alternative substances have been developed to take the place of these hazardous substances for most uses. Although the production of PFOA and PFOS has been largely phased out, these substances have not been completely eliminated from the marketplace. PFOA- and PFOS-related substances continue to be stored and used in the State.

**Costs Relating Primarily to Storage**

The initial costs of complying with this rule are twofold: determining whether products containing PFOA or PFOS at concentrations of 1 percent or more are stored at each facility, and registering each facility with one or more regulated storage tanks that store these hazardous substances. Information regarding the presence and concentration of PFOA or PFOS in particular substances may be available free of charge through Safety Data Sheets prepared by chemical manufacturers, distributors, and importers or access to results of analysis undertaken by business consortiums or others. In the event laboratory analysis is necessary, the Department’s experience is that the cost to analyze a sample to determine the presence and concentration of PFOA or PFOS is expected to be in the several hundred dollar range. Registration fees, set forth at 6 NYCRR Section 596.3(a), are determined by the number of regulated tanks and the capacity of each tank. The fees range from $50 per tank for tanks with capacities less than 550 gallons to $125 per tank for tanks with capacities greater than 1,100 gallons. Under 6 NYCRR Section 596.2(c), these registration costs recur every two years for as long as the entity continues to store hazardous substances listed in Section 597.3.

Non-registration storage-related costs of initial and continued compliance are expected to vary primarily based on quantity of hazardous substances stored at each facility. If a facility discontinues storage by April 25, 2018, when the storage and handling standards go into effect, there will be no regulatory costs associated with storage of these substances beyond the payment of the initial registration fee. If a facility continues to store these hazardous substances after April 25, 2018, costs associated with continued compliance will include costs of annual spill prevention reports and inspection of storage equipment every five years. The Department’s experience with other CBS facilities suggests that these costs may range from hundreds to
thousands of dollars. The Department is unable to provide a more complete estimate of costs because it is unknown how many facilities store these hazardous substances and costs will vary greatly by facility depending on quantity of hazardous substances stored and whether professional services are utilized. The Department expects that costs will be reduced over time given the phase out of the manufacturing of the material and anticipated reductions in use.

**Costs Relating Primarily to Release Prohibition**

As noted above, USEPA previously restricted production and importation of PFOA- and PFOS-related substances. Alternative substances have been developed to take the place of these hazardous substances for most uses. Most of the PFOA- and PFOS-related substances that continue to be stored in the State are firefighting foams that were produced prior to 2016. Although not a cost of complying with this rule, some entities will likely incur costs to determine if stored foam contains one or more of these hazardous substances and/or to replace the foam if the use of the foam could result in the release of an RQ of a hazardous substance. The cost to replace firefighting foam, based on information gathered from firefighting foam suppliers, ranges from $16 to $32 per gallon; an entity’s cost to replace firefighting foam depends on the amount and type of foam that is being replaced. For example, airports and major oil storage facilities have informed the Department that they may store 1,000 – 8,000 gallons of foam; hence, if their entire supply of foam needs to be replaced, their new foam could cost between $16,000 and $256,000. Utilities also may store significant supplies of firefighting foam. Since PFOA and PFOS have not been classified as hazardous wastes under the federal Resource Conservation and Recovery Act, older foams may be disposed of as a solid waste after solidifying the firefighting foam (i.e., mix with concrete) as follows:

- Individuals and institutions may dispose of the solidified foam in a permitted landfill.
- Generators of industrial wastes (e.g., factories and major oil storage facilities) must have a specific Department authorization to dispose of solidified foam in a permitted landfill and must contact the Department's Division of Materials Management prior to disposal.
Avoiding releases is not expected to present significant compliance costs because normal operations should not include releases of reportable quantities of hazardous substances. Costs of reporting any releases of an RQ of a hazardous substance, which are costs associated with noncompliance with the release prohibition, include the cost of determining whether a release of a reportable quantity of a hazardous substance has occurred (based on quantity released x known concentration) and the cost of notifying the Department of the release by calling the Spill Hotline. The costs are expected to be insignificant. Other costs associated with releases are discussed below under Costs Relating to Remediation.

**Costs Relating to Remediation**

Remediation costs are not costs of complying with this rule. However, where PFOA or PFOS has been released into the environment creating contamination that represents a significant threat to public health or the environment, regulated entities including small businesses and local governments may be subject to costs associated with remediation of these hazardous substances under Part 375. The costs of implementing a remedial program where PFOA or PFOS is a primary contaminant will vary widely as the costs depend upon many factors (e.g., quantity released, media contaminated, extent of contamination, etc.). Because of the wide variety of scenarios, it is not possible to meaningfully estimate costs of remediation other than to note that remedial program costs for other hazardous substances have ranged from the thousands to millions of dollars on a case-by-case basis.

5. **ECONOMIC AND TECHNOLOGICAL FEASIBILITY**

Compliance with this rule is technologically feasible for all entities, including small businesses and local governments. The storage tank systems required by this rule are readily available and commonly used for storage of other hazardous substances. The technology required for compliance with this rule is no different than the technology already in use by entities storing other hazardous substances.
As discussed above, costs associated with this rule are expected to vary greatly by facility depending on quantities of PFOA and PFOS stored or used. Therefore, the economic feasibility for small businesses or local governments to comply with this rule depends upon whether, and to what extent, these entities are storing or using PFOA or PFOS. The Department expects that most small businesses and local governments are not storing or using significant quantities of these hazardous substances, with the possible exception of entities storing firefighting foam (such as fire departments). For entities that do not store or use significant quantities of PFOA or PFOS, it should be economically feasible to achieve and maintain compliance with this rule. For entities storing or using significant quantities of these hazardous substances, particularly entities storing large quantities of old firefighting foams, initial compliance with this rule may present some challenges in terms of economic feasibility if there is a need to replace stockpiled foam. Economic feasibility of compliance for entities using firefighting foams is improved due to the rule’s provision allowing such entities until April 25, 2017 to use foams for firefighting, but not for training or other purposes, thereby providing time to replace their foams, if necessary. Continued compliance with this rule should be economically feasible for all entities.

Although separate from compliance with this rule, regulated entities, including small businesses and local governments, may be subject to the requirements of Part 375 where releases of PFOA or PFOS have occurred. The economic and technological feasibility for such entities to remediate a PFOA- or PFOS-contaminated site will depend upon the circumstances. For cases where contamination is limited (e.g., low-level shallow soil contamination with no other media contaminated), there may be no significant economic or technical issues to resolve. If contamination is extensive, a small business or local government may face both economic and technical obstacles. Costs could extend into the millions of dollars for a complicated site. Since PFOA and PFOS are persistent and mobile compounds, removal of PFOA or PFOS contamination from some media (e.g., deep groundwater, bedrock, sediment) may be technically challenging. For more than a decade the US DoD’s Strategic Environmental Research and Development Program has been engaged in evaluating remedial
technologies that may be effective for PFOA and PFOS remediation. These efforts are ongoing in partnership with the USEPA and United States Department of Energy and may provide significant guidance to small businesses and local governments faced with undertaking significant PFOA or PFOS remediation projects, as needed.

6. MINIMIZING ADVERSE IMPACT

This action does not lend itself to the mitigating measures listed in State Administrative Procedure Act section 202-b(1), specific to small businesses and local governments. The timing of the applicability of an element of the rule allows entities with firefighting foams until April 25, 2017 to continue to use foams to fight fires, but not for other purposes, allowing time to determine whether the foams contain one of these newly listed hazardous substances and to replace foams if necessary. Additionally, there are existing requirements established in the regulations that are intended to minimize adverse economic impacts on regulated entities, including small businesses and local governments. For example, the CBS regulations allow a two-year period after a new chemical is added to the list of hazardous substances before the handling and storage requirements of 6 NYCRR Part 598 apply to existing tanks storing one of these substances (subdivision 598.1(h)). The Department has determined that the remaining regulatory compliance provisions, including the storage, handling, release prohibition, and disposal provisions, appropriately apply to small businesses and local governments.

7. SMALL BUSINESS AND LOCAL GOVERNMENT PARTICIPATION

The Department provided and continues to provide statewide outreach, including outreach to small businesses and local governments. The Department ensured public notice and input for this rule by issuing public notices of the proposed rule making in the State Register, newspapers, and the Department’s Environmental Notice Bulletin. The Department held three public hearings in June 2016 during the public
comment period. Information was made available to the public on the Department’s website and, in print, immediately prior to each hearing. Interested parties, including small businesses and local governments, had the opportunity to submit written comments and participate in the public hearings. The Department maintains a listserv to which persons/entities, including small businesses and local governments, may subscribe so that they can receive information about this rule. The Department also continues to post relevant rule making documents on its website.

8. CURE PERIOD OR OTHER OPPORTUNITY FOR AMELIORATIVE ACTION

If a facility is subject to the CBS facility registration requirement due to storage of PFOA or PFOS, and fails to register in accordance with 6 NYCRR Part 596, the facility owner/operator would be subject to penalties that have been in place and imposed by the Department for decades. The listing of PFOA and PFOS as hazardous substances makes applicable the existing compliance requirements, including requirements for design, construction, and ongoing maintenance. Facilities with existing tank systems storing PFOA or PFOS have until April 25, 2018 to come into compliance with existing requirements. Violations of these compliance requirements have well-established and exercised enforcement procedures including imposition of monetary penalties when appropriate. These penalties are applicable to all types of entities, including small businesses and local governments. Therefore, no additional ameliorative actions or cure period are established for this rule regarding CBS registration and handling and storage requirements.

As discussed above, this rule provides firefighting entities until April 25, 2017 to continue to use foams that contain a concentration of PFOA or PFOS that would result in the release of an RQ when used, to fight fires, but not for other purposes. There can be no other ameliorative actions or cure period regarding the prohibition against releasing an RQ of PFOA or PFOS to the environment because the prohibition is absolute and intended to prevent harm to public health and the environment when PFOA or PFOS is improperly treated, stored, transported, disposed of or otherwise managed. If there has been a release to the environment that
requires remediation under a Department remedial program, the timing and content of the remediation is
developed on a case-by-case basis. This allows the Department to consider and apply appropriate ameliorative
actions. The concept of a cure period does not apply in the case of a remedial program.

9. INITIAL REVIEW OF THE RULE

The Department will conduct an initial review of the rule within three years of the promulgation of the
final rule.