

Study on International Trends Regarding PFAS FY2020

Summary of This Study

Since PFOS and PFOA, which belong to PFAS, were recognized as toxic and persistent in the environment, they are subject to the regulations under the Stockholm Convention on persistent organic pollutants, and Japan has been implementing or considering measures including their prohibition of manufacture and import under the Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. (the Chemical Substances Control Law). There was also a proposal for PFHxS to be included in the substances subject to the Stockholm Convention, relevant discussions have been progressing. In addition, recently, toxicity and environmental persistence of not only PFOS/PFOA/PFHxS but also many other PFAS have become issues of concern for many countries, and the discussion on how to manage a whole PFAS has become more active in those countries.

This study was conducted in order to collect and organize information on PFAS regulations of foreign countries and analyze possible impacts of such regulations on Japan as well as identifying amounts of stocks of PFOS/PFOA/PFHxS in Japan.

(1) Survey on the current consideration status in foreign countries regarding PFAS regulations

The contractor collected information on administrative responses to PFAS and their rationale and background in U.S.A., Canada, Australia, EU, Germany and Sweden through literatures and websites. The contractor conducted interviews with administrative officers/experts in those countries on their regulations on the use of PFAS and products containing PFAS and target levels of PFAS in drinking water and the environment through online meetings.

(2) Analysis of impacts of the PFAS regulations on Japanese policy

The contractor collected information on amounts of manufacture and import, types of applications (processes and products), the remaining amounts in the market, alternatives to the existing PFAS in the market and their expected disposal timing, and monitoring results in the environment regarding regulated substances (including candidates) identified in the study addressed in (1) in Japan through literatures and websites. The contractor also interviewed with experts and analyzed what kinds of impacts would occur if these substances were regulated in Japan as well.

As the result, the status of products containing PFAS remaining in the market could not be identified, but as for industrial application products (e.g., surfactants, water and oil repellents, refrigerants/heat media, cleaning agents), the products that are in use and were used may exist in factories and offices that use them. Also, it was considered that there is a possibility that fire-

fighting foams containing surfactants, paper and textile products processed with water and oil repellents, products using refrigerants/heat media, or *fluororesin products exist in the market*.

(3) Survey on stocks of PFOA/PFHxS

The contractor conducted a survey on types, concentrations, and amounts of manufacture and import of fire-fighting foams containing PFOA/PFHxS, future possible alternatives, status of current and past use of fire-fighting foams and other products through the literature survey and interviews with manufacturers and relevant organizations. The contractor also attempted to estimate amounts of their stocks; however, it was not possible because the details of regulations under the Chemical Substances Control Law have not been implemented and because the target fire-fighting foams could not be identified. Although the stocks of fire-fighting foams containing PFOA/PFHxS could not be estimated, their shipment and stocks were expected to be smaller than those of PFOS.

(4) Survey on challenges to promote alternatives of fire-fighting foams containing PFOS

The contractor conducted interviews and a questionnaire survey with companies and industry stakeholders that store fire-fighting foams containing PFOS about challenges to promote their alternatives and identified technical, institutional and economic challenges for parking lots, petrochemical complex, airports that use mainly fire-fighting foams containing PFOS.