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Comment on Proposed Restriction of PFAS

Japan Valve Manufacturers' Association (JVMA)

Japan Valve Manufacturers' Association (JVMA) appreciates the opportunity to provide comments to the PFAS restriction proposal.

1. Introduction

JVMA was established in 1954 and has been a representative association of Japanese valve industry for nearly seventy years. As of today, we are comprised of 115 major domestic valve manufacturers including several Japanese subsidiaries of European valve makers and additional 68 associate companies. Since our establishment, we have implemented various effective programs to contribute to society, occasionally cooperating with some of Central Government Ministries and Agencies. Especially we are pouring the biggest effort to resolve environmental problems, so the Environmental Committee and four working groups in our organization are working on the following issues:

- Greenhouse gas reduction.
- Design for the environment of valves.
- Life cycle assessment of valves.
- Gathering information on restricted substances.
- Environmental education.

To response to the PFAS restriction proposal, we have prepared a technical and socioeconomic statement which is attached document.

2. Comment

The origin of valves is thought to be wooden cocks excavated from ancient Egyptian ruins around 1000 years ago. In ancient Roman times, aqueducts were installed and bronze faucets were used. Humans have evolved civilization.

The uses of valves, which started with drinking water and beer, have diversified. Valves are required to have sealing performance.　Until the invention of polymers, seals were made from plant-based materials such as rope and various fibers. Rubber was the best material for the seal.

However, along with the deepening of sealing materials, liquids and gases that decompose them have also come to be used in industry. In response, fluoropolymers and fluor elastomers have been used only where necessary. There may be no evidence left behind why the fluor resin material was selected. Factory owners and consumers will not tolerate excessive quality. Fluoropolymers and fluor elastomers have been properly adopted in various sectors over the years. Technically and economically feasible alternatives are not generally available. Loss of functionality of valve sealing could have substantial economic implications, including shorter operational lifetime of infrastructures, increased frequency and costs of maintenance, and increased operational downtimes. Valve seal parts include gaskets, packing, valve seats, linings, bearings, and press-fit seal members.
We require valves to comply with the conditions of restriction “until 13.5 years after EiF”.