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TO: The Committee on Environment and Natural Resources Maine State Legislature

Re: Support for the following 3 related Bills: LD 400; AFFF Reporting Requirement: LD 222; AFFF Take-Back Program: LD 407; Brunswick Landing Cleanup by 2026.

Dear Chairperson Doudera and Members of the Committee,

I am a long-time citizen of Brunswick, Maine, and as a Professor of Chemistry and Biochemistry at Bowdoin College, have published many papers on the fate and effects of various pollutants on living environmental systems. In addition, I have been the Town of Brunswick representative to the Restoration Advisory Board (RAB) since 2014 and a member of the Brunswick Area Citizens for a Safe Environment (BACSE) since 2012. As such, I have extensive experience with activities involving AFFF at the former Brunswick Naval Air Station (BNAS). With heightened public concern on PFAS issues at the former BNAS over the last year, I have been particularly active as a source of information and support for individuals, citizen groups, the Town of Brunswick and elected officials.

Based on my experience, I am writing in strong support for each of the 3 related AFFF bills before your Committee: LD 400, which would establish much needed reporting requirements for AFFF storage: LD 222, which creates a take-back program for AFFF to provide for the safe collection, storage, and disposal PFAS-based AFFF: LD 407, which mandates the removal of all remaining PFAS-based AFFF from Brunswick Landing by 2026.

The Base Realignment and Closure (BRAC) Act of 1990, established a framework for the remediation and restoration of former military bases to enable their transfer to civilian entities for safe re-use. As part of the restoration and re-use process conducted by the military, public involvement was required in the form of a Restoration Advisory Board (RAB) for each location. RABs fulfill a statutory requirement for the Department of Defense (DoD) to establish a committee to review and comment on DoD actions and proposed actions regarding environmental restoration and remediation. For the former BNAS, the Restoration Advisory Board is comprised of representatives from the Navy, USEPA, Maine Department of Environmental Protection, and local citizen representatives from each of Brunswick, Harpswell and Topsham. Citizen RAB members provide input into the planning and decisions that are made concerning remediation and the monitoring the known contamination at the former Brunswick Naval Air Station. The RAB meets 3 times a year, generally in January, in Summer and in Fall. The meetings are advertised in local media, are open to the public and meeting materials and minutes are made available. In addition, as part of the BRAC process, the USEPA provides support for a citizen's advisory group to promote public oversight, information and participation. In Brunswick, this citizen's group has been in active stakeholder status through the Brunswick Area Citizens for a Safe Environment (BACSE) for 35 years.

Some Background: The BNAS has had a long history of remedial activities designed to identify and remove deposits of contaminants designated as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) or Superfund, as part of the preparation of properties for safe civilian use. Today, the focus is on PFAS, perfluoroalkyl substances, or forever chemicals, associated with fire suppression systems in the hangars on the base. There are a number of PFAS compounds associated with AFFF, but one of the PFAS compounds of greatest environmental and health concerns is PFOS (Perfluorooctanoyl Sulfonate), a key component of fire suppression systems on the former base in Hangars 4 and 6. The stores of PFOS-based AFFF in Hangar 4 were lost in the catastrophic August 19, 2024 spill incident and about 800 gallons remain in Hangar 6. In addition, there are here are still 1000's of gallons newer PFAS-based AFFF stored on the former base in Hangars 5 and 7, managed by the Midcoast Regional Redevelopment Authority (MRRA). Because PFOS is now on the Superfund list of hazardous substances, much of the current environmental monitoring and remediation effort has been directed toward PFAS compounds associated with the use of AFFF on the base. Through AFFF releases during the decades of operations at the BNAS site, there exist locations on the former base with ground water concentrations of PFOS that are among the highest in the State.

Comments on: LD 407: An Act to Prohibit the Use of Aqueous Film-forming Foam at the Former Brunswick Naval Air Station. Since taking over the management of the airport facilities in 2011 from the Navy, MRRA has had 3 known AFFF spills: in 2012, Hangar 6 lost 2000 gallons of 62FTS-based Ansulite AFFF, which MRRA replaced with legacy stores of older PFOS-based AFFF. This hazardous material remains in Hangar 6 to the present day. The proximity of Hangar 6 to the Brunswick Topsham Water District well field, makes this a high-risk situation. In addition, the Brunswick Sewer District has measured high levels of PFOS in the floor drain effluent from Hangar 6, and recently measured high levels of 62FTS and PFOS in the oil/water separators that are part of the drain system, indicating the presence of material from the 2012 spill (62FTS) and material post-2012 (PFOS). The AFFF material in the Hangar 6 effluent goes to the Brunswick sewage treatment plant. In 2019, PFOS-based AFFF was spilled in Hangar 4 and in 2024, the remainder was lost when the fire suppression system was activated by an unknown cause, resulting in wide-spread contamination, which lingers to the present day. It is important to note that Hangar 4 is owned by the Navy and leased to MRRA. Since 2020, the DoD has ordered the removal and disposal of PFAS-based AFFF from the aviation facilities of the various Services. MRRA could have requested that the Navy remove the PFOS-based AFFF from Hangar 4. In fact, it was a group of concerned private Brunswick citizens who petitioned Senators King and Collin in early 2023 to seek the removal of AFFF from Hangar 4. The process to do so was initiated within 2 months of this request and was due to begin in September 2024. Sadly, the August 19, 2024 Hangar 4 AFFF spill occurred first.

MRRA is also responsible for the safe storage of ~ 1600 gallons of 62FTS-based Ansulite AFFF, a close relative of PFOS-based AFFF, in Hangar 5 and ~ 1400 gallons of a newer PFAS-based AFFF in Hangar 7, built by MRRA in 2019. Please keep in mind that MRRA is a real estate development entity and has not managed the complex military grade fire-suppression systems in the airport hangars very well. LD407 will guarantee that these dangerous materials will be removed in a timely, predictable and safe way. This is very important because the Brunswick Executive Airport is unusual due to its close proximity to residential and commercial areas, public drinking water wells, and sensitive marine and estuarine resources, all of which have been and will be adversely affected by any additional releases of AFFF, particularly from Hangar 6.

Comments on LD 400: Resolve, Directing the Department of Public Safety, Office of the State Fire Marshal to Compile a Statewide Inventory of Aqueous Film-forming Foam Concentrate.

Although the dangers of PFAS-based AFFF were long recognized, it was when PFOS was finally placed on the Superfund List in April, 2024 that this toxic forever chemicals could be effectively regulated. There will certainly be more PFAS compounds added to the Superfund List. This is important because in the past, the dangers of PFAS-based AFFF were not recognized and stocks of these materials were freely distributed. For example, after MRRA took ownership of the Airport from the Navy, AFFF materials were given to fire departments around the State. Bridgeton received a crash truck, which normally contained ~150 gallons of AFFF plus about 2000 gallons of water, to be mixed to produce foam to put out fires. Because PFOS was likely the foaming agent in the AFFF sent out to fire departments, the simple fact that PFOS is now officially a hazardous substance under CERCLA means that it must not be used as a fire suppressant by anybody. LD400 is the first step in getting this dangerous situation under control.

Comments on LD 222: An Act to Establish a Take-Back and Disposal Program for Firefighting and Fire-suppressing Foam to Which Perfluoroalkyl and Polyfluoroalkyl Substances Have Been Added. The risk of having containers of AFFF spread around the State represents an unacceptable risk to individuals, water supplies and communities. There is also the under-appreciated issue of occupational exposure to PFAS, both through use and storage. Because of the very low concentrations of PFAS species considered hazardous, the accidental release of stored material or the deliberate release of this material in fire suppression, can cause a major pollution incident. For example, the release of about 10 gallons of PFOS-based AFFF into Lake Auburn would render the water in the city of Auburn reservoir unfit to drink. The safe drinking level for PFOS in drinking water is currently 4 parts per trillion, a truly minute amount. This is equivalent to 4 drops PFOS mixed into 20 Olympic sized swimming pools full of water.

While a take-back and disposal program would be costly, the consequences of a repeat of the 2024 AFFF spill at Brunswick Landing elsewhere in Maine would prove to be equally costly, or even more. The issue is not whether Maine can afford to do this, but whether Maine can afford the consequences of not implementing LD222. As my first-grade teacher, Mrs. Thomas always said, "An ounce of prevention is worth a pound of cure."

Conclusion:

As with the enactment of the Maine Coastal Conveyance Act (CCA), passed in 1970, which was the forerunner of CERCLA, Maine has been a leader in taking informed steps to protect the health and safety of its citizens. I believe that the failure to enact LD407, LD 400 and LD222 will cost the State of Maine, individual homeowners and communities far more in aggregate than the costs associated with their enactment and implementation.

Sincerely yours,

David S. Page, Bowdoin College Professor of Chemistry and Biochemistry Emeritus https://www.bowdoin.edu/profiles/faculty/dpage/index.html