

DATE: February 25, 2026

POSITION: Neither For Nor Against
(Proposing Amendment)

RE: Establishing a "Polluter Pays"

Framework for Orbital Aerosols and Debris

Senator Tepler, Representative Bell, and

distinguished members of the Committee:

My name is Robert F Arundel, and I am a

resident of Auburn. I am submitting this

testimony to urge the Committee to

expand the scope of LD 474 to include a

modern environmental threat currently

being ignored: atmospheric metallic

aerosols from commercial space

operations.

As Maine moves forward with the Maine

Space Corporation and its 2026 launch

goals, we are ignoring a "Forever Chemical"

crisis in the making. Data published in

Nature (Feb 19, 2026) confirms that

commercial satellite re-entries have

caused a 1,000% spike in atmospheric lithium. Current models show 29 tons of metal—the mass of one SUV every hour—vaporizing in our stratosphere. Because of Maine's northern latitude, we are in a 26% annual risk zone for debris impact and aerosol concentration.

PROPOSED AMENDMENT: THE PROPORTIONAL PENALTY MODEL

To ensure that penalties are not merely seen as a "cost of doing business" by trillion-dollar entities, I propose a staged fine structure that scales with the size of the operation:

Initial Violation: A minimum fine of \$1,000,000 or 1% of the total mission launch cost (whichever is greater) for failure to provide a verifiable debris recovery plan.

Escalated Violation: An additional \$1,500,000 or 1.5% of the total mission

launch cost per day for continued non-compliance or exceeding lithium/aluminum aerosol safety thresholds.

We must not allow the "Moon Rush" to leave Maine with a stratospheric Superfund site. I urge the Committee to ensure that "Natural Resources" under LD 474 includes the integrity of our upper atmosphere.

Respectfully submitted,

Robert F Arundel

207-517-1983