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**TESTIMONY OF
SUSANNE MILLER, DIRECTOR
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MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION**

SPEAKING IN OPPOSITION TO L.D. 826

**AN ACT TO PROHIBIT THE DISPOSAL OF CERTAIN SOLAR PANELS IN THE
STATE AND REQUIRE BONDS TO REQUIRE DISPOSAL COSTS**

SPONSORED BY REPRESENTATIVE LEMELIN

**BEFORE THE JOINT STANDING COMMITTEE
ON
ENVIRONMENT AND NATURAL RESOURCES**

DATE OF HEARING:

MARCH 15, 2023

Senator Brenner, Representative Gramlich, and members of the Committee, I am Susanne Miller, Director of the Bureau of Remediation and Waste Management at the Department of Environmental Protection (DEP), speaking in opposition to L.D. 826.

This bill proposes in part to prohibit placing or facilitating the placing of any heavy metal-containing commercial solar panels into a solid waste disposal or incineration facility in Maine, or otherwise burying, incinerating, depositing, or dumping these materials. The bill further describes that a heavy metal-containing commercial solar panel is a solar panel not designed for residential use that contains more than a de minimis amount of

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arsenic, cadmium, chromium, lead, selenium or silver. While this may seem like an effective way to reduce heavy metals entering Maine's environment, there are broader implications to this legislation.

First, waste materials that contain heavy metals must undergo a test known as the Toxicity Characteristic Leaching Procedure (TCLP) to determine if certain materials, like the metals identified in this bill, are likely to leach into the ground. The TCLP test itself is a simulation of leaching potential through a landfill and generally provides a pass/fail rating along with an amount or concentration of each metal contaminant present in the material tested. If a material fails the TCLP, the waste must be managed as hazardous waste pursuant to 06-096 C.M.R. ch. 850, § 3(B)(5) and may not be accepted by a typical solid waste landfill or incinerator, nor may it be disposed of by burial, burning, depositing, or dumping in Maine.

In the event that that commercial solar panels with heavy metals do pass the TCLP test they would not need to be managed as a hazardous waste, however at this time it is unclear how many solar panels would fall into this category. If the majority of commercial solar panel wastes were able to pass the TCLP, locations would be required for proper disposal, recycling or reuse of these materials. An outright prohibition of disposal options as outlined in this bill would effectively ensure that there would be no place in Maine to properly manage solar panel wastes. Since there are no recycling or reuse facilities for solar panel wastes in Maine, this means that all solar panel wastes would be required be shipped out of state adding transportation costs as well as contributing to generation of greenhouse gases.

At this time the infrastructure for solar panel recycling is just emerging, and the market for secondary reuse of solar panels is evolving. Organizations like the Solar Energy Industries Association (SEIA) are working to establish partnerships to develop and encourage recycling and reuse of the components of solar panels while ensuring

(L.D. 826, An Act to Prohibit the Disposal of Certain Solar Panels in the State and Require Bonds to Require Disposal Costs)

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components that cannot be recycled or reused are properly disposed. On the recycling and reuse front, concerns still need to be ironed out relating to electrical grid interconnection regulations, as well as fire, building, and electrical codes that must be examined in planning for solar panel reuse.

The long-term horizon suggests that both industry, government (including discussion among states including Maine), and recycling organizations all support recycling of solar panels. However, at this time the nearest to Maine solar panel recycling facility is located in Ohio. There are also only a few of these facilities scattered around the United States. Because the infrastructure is not yet fully developed for recycling or reuse, the bill would in effect ban disposal of solar panels in Maine, require out of state disposal, and would not necessarily enhance recycling as the available options for recycling are not yet widely available.

Thank you for the opportunity to provide testimony. I am available to answer questions of the Committee, both now and at work session.