

Testimony Opposing HB1250

Wood Vaults Authorization and Permit Requirements

House Environment and Transportation Committee

Wednesday, March 6, 2024

Position: OPPOSE

Dear Chair Korman and Members of the Committee,

The twelve undersigned organizations represent constituents from Maryland’s Eastern Shore to Western-most Garrett County and oppose HB1250 which would authorize and establish permit requirements for wood vaults. We are fundamentally opposed to the concept of wood vaults when attached to carbon credits because the goal automatically turns towards profit and away from forest health, biodiversity, and climate.

This particular project aims to create wood vaults that are “economically viable for large scale in a world-wide carbon market.” (See [presentation](#) at 26:30)

What is a wood vault?

A wood vault is one of the new hybrid nature-engineering methods that are currently being tested for their ability to combat climate change. The wood vault requires wood, which naturally stores CO₂, to be logged and buried underground or in a mound.

What is large scale?

The current aim is for wood vaults that are 2.47 square acres, (1 hectare) of surface land, 65 feet tall (20 meters) and collect unused wood from an area the size of 10 typical U.S. counties or 9,600 square miles (25,000 km²). However, these can be doubled up or put on top of each other so they could get even bigger (see [presentation](#).)

What are the problems?

1. Carbon Credits: Allowing carbon credits to be earned with wood vaults creates a perverse incentive to increase unnecessary logging. When wood (or waste wood) becomes profitable, logging increases. Currently, [wood vault start-ups are pre-purchasing carbon credits](#) which they can then sell to big polluters as they fill the vault. Some wood vault companies are going as far as automating logging to fill the vault as needed, which can generate steep profits for the owners and allow big polluters to conduct business as usual.

The problems with logging:

- Maryland is already logging too much, per the [2023 Maryland Stewardship Disalignment Report](#) authored by the Environmental Policy Center, the Maryland Forestry Foundation, and the Department of Natural Resources, which warns that the “harvest allowances built into the stewardship plans may preclude forest landowners from participating in certain ecosystem markets.” In other words, we are already logging too much forest to also guarantee the ecosystem services we truly need: CO2 draw-down, clean air, water filtration, fertile soils, and habitat for our dwindling wildlife.
- Logging removes trees that would continue to draw down CO2 to store it in the soil and their mass until they die- often centuries, sometimes even millennia. When we log our trees (usually between 50-100 years of age), we cut their life short and limit their carbon uptake capacity. Newly planted trees will take decades to start drawing down pollution and often centuries to match the draw-down capacity of a mature logged forest. We don’t have the time to wait for these trees and forests to grow back.

2. Emissions calculations: Not all of the following emissions are being counted:

Logging emissions: Logging is one of the [most polluting industries](#) and includes: road building, logging equipment and fuel; loss of soil-c; Arbuscular Mycorrhizal Fungi Network (AMF) die off; soil compaction, transportation of the wood, processing. While the wood vault for now would focus on waste wood, as a product of logging, it generates the same emissions. (Only the live biomass & CO2 is removed from the forest: the above ground trees. The roots, AMF, damage to other trees, soil, and vegetation – which all release CO2 when they die- is generally not counted in logging operations.)

Vault operating emissions: Collecting and transporting wood (potentially from up to 10,000 square miles); testing it for chemicals (at a UMD laboratory for now); sorting the wood and filling the vault; [constructing the vault](#) – unless it is an abandoned pit, quarry, or mine, there is necessary construction involved in any type of vault – consider the size. Finally, there has to be monitoring – ideally by a third party- and testing for leaks for centuries or millennia and then finally closure and cleanup of the vault.

3. Additional problems: *As written*, the bill presents concerns around:

Rationale: Wood from conifer species decomposes over [57 to 124 years](#). [Hardwood species typically take 46 to 71 years](#). The wood vault would hold “woody biomass that otherwise would release CO2 back into the air within 20 years.” If we leave wood to decompose (ideally on the forest floor), it will not release this CO2 for a much longer time, generate fertile soils, and provide much needed habitat for many animals and millions of micro-organisms, not to mention help humans with food security in the long run. On the other hand, removing deadwood may not only be destructive for biodiversity and hamper the ability of forests to regenerate, but it could actually [substantially increase atmospheric carbon](#), in addition to all the emissions listed above.

Wood type: As written, any wood (“woody biomass”), as long as it does not contain toxic chemicals or has a different purpose, would qualify for a wood vault.

Land: Wood vaults are planned for land that was placed in agricultural preservation easements. The wood vault would disrupt the protected land and potentially pollute it, including aquifers and waterways, in order to generate additional profits on an existing easement. Furthermore, how can we predict how land, waterways, and aquifers may shift over the next centuries?

Permits: Existing permitting for landfills and incinerators has proven insufficient to keep our communities safe. Yet, the same permitting would apply to this new and untested concept.

The best strategy to support carbon drawdown and sequestration remains to protect existing forests, let them grow old and let them provide us with the ecosystems services we truly need. We urge you to vote unfavorable on HB1250. Thank you.

Respectfully,
Signatory Organizations

Beaver Creek Watershed Watch Group

Tom Taylor
CoChair

Fellowship of Scientists and Engineers

Elizabeth Law
Chair

Clean Water Action

Jennifer Kunze
Maryland Organizing Director

John Muir Project

Jennifer Mamola
Policy and Advocacy Director

Climate Communications Coalition

Sonia Demiray
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Howard County Climate Action

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