

To whom it My Concern,

The Society for the Protection of New Hampshire Forests Conservation Center, located at 54 Portsmouth St, Concord NH is requesting a Conditional Use Permit for a storage silo to be located within the Bluff Buffer. This proposed silo will contain either dry wood chips and or wood pellets to fuel a new biomass boiler.

Background: In 1996, the Forest Society built a heating plant to provide heat to the Conservation Center. Chip – Tec, from Willingston Vermont, was contracted to install a gasifier as part of the hydronic heating system. The gasifier uses green wood chips as a fuel from Henniker Hardwood Pallets (HHP).

In 2016, Chip Tec went out of business, leaving no expertise to maintain the biomass boiler and in a study conducted in 2019 by North East Biomass it was determined the gasifier is beyond its useful service life.

In addition, HHP decided to move the supply of green wood chips out from under cover, exposing the chips to the weather, such as rain, snow etc. This led to a significant decrease in efficiency at times and often the boiler loosing flame. This caused an overreliance on the back up propane boiler.

Proposed: Given the stated circumstances, the Forest Society has decided to replace the Chip-Tec with a new biomass boiler. The proposed replacement is a Froling T4-130/150 biomass boiler with the capability to burn Dried Wood Chip (PDC'S) and/or wood pellets. The new boiler would solve the boiler reliability concerns and using either wood pellets or PDC'S would solve the fuel consistency problem. The only remaining problem to address is onsite fuel storage.

Because of the limited storage space, about 4 tons, in the existing heat plant, we receive two to three deliveries per week and the delivery charge for the 30-minute commute is close to 75 % of the cost for the green wood chips. The proposed fuel storage silo will have the capacity to store 20 or 25 tons of fuel. Thus enabling a full truck of 14 tons of PDC'S to be delivered while leaving enough in the silo as a cushion. The estimated amount of deliveries will be 6 to 8 per heating season. Froling Energy will deliver the PDC's from Keene, thus having the cushion will be important.

We understand the existing heat plant and the paved surface behind the heat plant are now within the Bluff Bluffer. By locating the silo behind the heat plant where the paved surface exists the impermeable surface will not increase. Further, we would like to remove the unnecessary asphalt thus increasing the permeable surface.







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