Ever-Green Energy Redline Comments on the Metro Solid Waste Management Plan 2022-2042

Part three Pages 35-37

Wood waste & Emerald Ash Borer (EAB)

The TCMA is heavily impacted by Emerald Ash Borer (EAB), with an estimated 20% of community trees being ash. All seven metro counties are included in the Minnesota Department of Agriculture's (MDA) EAB quarantine area, with infestation and dead and dying ash trees observed throughout the area. Dead ash trees are known to become brittle, causing safety hazards. Additionally, climate change has increased the severity and frequency of storms that knock down trees and branches that must be quickly removed to preserve access to sidewalks and roads and to restore power. These factors have led to large volumes of ~~wood~~ tree waste needing to be managed. The trajectory of the EAB infestation suggests we are still five to ten years from peak volumes of ~~wood~~ tree waste from EAB in the TCMA (Figure 8). Currently, the St. Paul Cogeneration (SPC) plant at District Energy ~~plant in~~ St. Paul manages approximately 250,000 tons of biomass from wood waste annually. SPC ~~The District Energy facility~~ is a combined heat and power plant designed to use ~~fueled by~~ biomass from tree and clean wood waste. In recent years, the facility has accepted tree~~wood~~ waste at no charge and relied upon revenue generated by energy sales to District Energy ~~the energy fees collected from its district~~ heating customers and ~~revenues from~~ electricity sold to Xcel Energy to operate ~~finance~~ the business~~plant~~. In 2021, the Legislature and ~~The~~ Public Utilities Commission ~~has~~ indicated they~~it~~ no longer support~~s~~ relying on just energy sales ~~fees and electricity sale revenues~~ to operate the facility and other revenue sources are needed, such as using ~~a~~ tip fee~~s~~ for tree~~wood~~ waste used as biomass fuel~~delivered to the plant~~. Other solid waste streams rely on tip fees to operate facilities to process the waste materials they receive. As such, it is a reasonable and credible path forward for ~~wood~~ tree waste generators to pay ~~a~~ tip fee~~s~~ for ~~to bring wood~~tree waste that will be disposed by processing it into biomass fuel ~~to the facility~~ in order

Commented [KS1]: The figure referenced is for all of MN and doesn't indicate a peak in the TCMA within 5-10 years. Suggest using other data/graphics from MDA specific to anticipated volumes in the TCMA.

assist with a portion of the processing cost. ~~facility's expenses.~~ It is also possible that similar to GRE-Elk River, SPC ~~the facility~~ will need to cease operations if the facility is unable to fill the revenue shortfall.

SPC's ~~With the District Energy facility,~~ capacity for managing tree and wood waste is already strained and being used to the maximum that the current power purchase agreement (PPA) with Xcel Energy ~~contract~~ allows. That PPA ends on December 31, 2024. If SPC were to ~~If the facility~~ cease~~s~~ operations for any reason, the capacity to ~~handle~~ manage wood waste in the TCMA will be drastically reduced, likely triggering a massive increase in open burning of tree waste~~piles~~. As has been experienced in Minnesota and the TCMA with the Canadian wildfires, in addition to affecting air quality, o~~O~~pen burning of trees creates a large amount of small particulate matter that can cause problems for people with asthma. Open burning can also become a wildfire risk to communities, particularly in times of drought.

Even if SPC~~District Energy~~ operations continue, it is certain that additional markets are needed to ensure ~~we~~that ~~direct~~ wood waste is being channeled to its highest and best use and to increase the ~~have~~ capacity to manage the ~~anticipated~~ rising tonnage of tree~~wood~~ waste material that EAB will generate.

Hierarchy of ash tree material management:

The MPCA partnered with the Environmental Quality Board (EQB), the Department of Natural Resources (DNR), and the Department of Agriculture (MDA) to release a report on EAB in 2019. The report details the scope of the problems caused by EAB and suggests strategies for meeting the challenges. The report also includes a hierarchy of ash tree materials management that seeks to prevent wood waste and to utilize wood for its highest and best use. The hierarchy should guide county planning efforts to minimize the environmental impact of managing wood in their communities.

The following strategies are needed to meet the challenges of managing wood waste throughout the TCMA during the upcoming planning cycle. The strategies will flatten the curve of waste trees generated, support existing markets for wood waste, and develop new markets to help relieve the pressure on current markets to handle the material.

Required strategies:

The strategies listed below are required to be incorporated into the CSWMP because they are relatively simple or have significant environmental benefit.

41. **Develop plans to prevent and manage tree~~wood~~ waste in each county and throughout the region.**

Plans should assume that tip fees will be necessary to help pay for the cost of processing tree~~wood~~ waste into biomass fuel for delivery to energy facilities like ~~plants, including~~ SPC~~'s District Energy, will have tip fees~~ to en~~able~~sure long-term economic viability of the plants. Plans should also not assume the Legislature will provide appropriate funds to biomass fueled plants to allow for their continued operations without the use of ~~a~~ tip fees on tree~~wood~~ waste. Plans should be modified to collect data to improve understanding of the tree~~wood~~ waste challenges—at a minimum the amount of tree~~wood~~ waste being generated and processed at wood yards. This means that plans

Commented [KS2]: https://www.dnr.state.mn.us/wildfire/prevention/causes.html

should include an ordinance requiring wood yards to register with the county and report volumes of wood waste collected, managed, stored, and disposed. Additional data should be collected on tree inventories and on facilities and industries (biomass, compost sites, mulch producers, tree care companies, etc.) that can participate in discussions about treewood waste management. Plans should consider setting goals, especially for treewood waste management options that offer the greatest environmental benefits. Plans should include strategies to educate the public about EAB, tree treatment and preservation, and responsible treewood waste management.

42. **Promote existing programs that use EAB-effected wood for furniture, home goods, flooring, and other purposes.** While the volume of treewood waste managed via these industries in these areas is not enormous, these industries do play an important role in the system by using wood to produce products, thus preventing waste. Additionally, these industries frequently educate the public about EAB, and they provide important economic benefits through the jobs they create and support. Ensure that these organizations are successful and continue to be available. Develop county purchasing requirements to utilize urban wood when available and encourage residents to purchase products made from urban trees. Consider financial support when appropriate.

43. **Composting and mulching operations must continue to be supported.** These industries provide an important outlet for tree wastewood waste management. Additionally, they serve as important infrastructure to help manage additional types of organic waste (i.e., yard waste and food scraps). Support that would meet this requirement could include grants or financial assistance to compost facilities, contracts that commit certain volumes of material to sites over a multi-year term, assistance with siting and/or meeting local permitting or land use requirements and promoting the use of the sites to the public and/or alternate strategies that ensure the long-term viability of composting capacity in the region.

Commented [KS3]: Does "these areas" mean sectors of business TCMA? If TCMA, I would add that to the sentence.

Optional strategies:

The following strategies are optional and may be incorporated into a CSWMP. Each strategy has been assigned a point value, which is added to the total amount of points the county must achieve for approval of their CSWMP by the MPCA.

44. **Update ordinances that address wood burning**.

Point Value: 4

Update ordinances defining rules for burning wood, including restrictions on commercial and municipal burning. Establish requirements that minimize the environmental and human health impact. Open burning is the least preferable management method. Expanding other management methods is the best way to avoid open burning.

45. **Develop and distribute EAB tree care education programs for privately owned land.**

Point Value: 8

Education through digital marketing and paper mailers should include an explanation of the risks to ash trees, why a mature tree canopy is important, safety concerns with dead ash trees, and focus on the benefits and cost savings of treatment versus removal.

46. **Incentivize tree treatment as a cost-effective strategy to extend the life of ash trees and to**

reduce
the volume of wood waste generated over the next 20 years.
Point Value: 8
Counties are encouraged to incentivize treatment of private and public trees and to develop financial incentives and/or provide support for treatment and tree preservation. It is much less expensive to treat trees and keep them living than to remove and replace them.

47. **Allow assessments on property taxes to spread the cost of tree care over a multi-year timeframe.**
Point Value: 9
Some communities have used tax assessments to fund tree care services even on private property. This would allow homeowners to defer costs to make tree care services available and affordable.

48. **Expand composting and mulching capacity beyond existing markets.**
Point Value: 5
Counties and/or cities can contribute to expanded capacity by offering commitments to deliver organics or wood waste at stable tip fees, purchasing compost and mulch, assisting sites in coming online and/or offering other financial, policy or technical support. This could be accomplished by developing the capacity for biochar or other new technologies. Biochar is a carbon-rich soil amendment and agricultural byproduct. Biochar is a broad term for any organic material that has been broken down through "thermal decomposition" at high temperatures in an oxygen-limited environment.~~It generates energy from biomass in the absence of oxygen.~~
Biochar operations are in early stages in the TCMA but may use wood waste in a beneficial way. The City of Minneapolis collaborated with Hennepin County to begin using biochar for landscaping in 2019. Counties and cities can develop additional capacity by providing financial support and siting assistance and adopting policies that support capacity development.

49. **Support development of systems that use wood fuel.**
Point Value: 4
Incentivize retrofits through financial or policy initiatives for heating with efficient, low-emissions wood burning appliances. Encourage use of Environmental Initiative's Project Stove Swap. Burning wood in retrofitted stoves is preferable to open burning. This strategy also reduces reliance on fossil fuels for home heating.

Appendix A (Page 50)

Yard waste

Under state law, yard waste should be separated from MMSW and is banned from land disposal. A few cities offer the collection of yard waste mixed with other organics for composting. Yard waste is managed through county, municipal, and private programs. Yard waste collection sites located throughout TCMA operate year-round or seasonally. They are operated by counties, cities, or private firms. Curbside collection of yard waste occurs in many areas using separate collection vehicles. Documented yard waste volumes are reported to the MPCA; in 2020,424,762 tons of yard waste was reported in the TCMA. The capture rate for yard waste in TCMA is 88.8%.
Invasive earthworms known as jumping worms are an emerging issue in Minnesota, with confirmed presence in Hennepin and Ramsey counties dating back to 2007. Tree diseases and invasive insects will continue to be an issue, despite efforts to diversify the tree canopy.
Emerald ash borer (EAB) is now identified in 30 Minnesota counties and continues to spread, which leads to the generation ~~creation~~ of tree~~wood~~ waste. District Energy St. Paul's ~~'s Saint Paul~~c ~~C~~ogeneration, ~~(~~St. Paul Cogeneration or SPC, ~~)~~ facility~~. SPC~~ is a biomass-~~-~~fueled combined heat and

power plant and is the only facility using biomass fuel from outlet at this time to manage the the hundreds of thousands of tons of treewood waste generated in and around the TCMA each year via biomass.

The PUC regulates energy production activities at SPC, as the facility is a source of electricity production for Xcel Energyenergy production.

SPC currently uses approximately processes about 250,000 tons of biomass fuel from treewood waste annually. WTE facilities play a strong role in MSW waste management and the Legislature as indicated that SPC is critical infrastructure for increasingly important in dealing with TCMA treewood waste. EAB projections suggest this will continue to be a pervasive issue, with greater spread and impact.

SPC provides an important service that is environmentally preferable. If SPC were to discontinue operationsservices, it would leave the TCMA without a substantial biomass fueled energy resource and would lead to intentional open burning or spontaneous fires. Uncontrolled burning of wood contributes to air pollution by releasing PM2.5, benzene, formaldehyde, acetaldehyde, acrolein, and polycyclic aromatic hydrocarbons (PAHs). Extensive scientific evidence demonstrates short-term exposure to PM2.5 causes cardiovascular health effects. In 2020, reported emissions at SPC were 77,200 tons of CO2e and a combined total of 0.34 tons of PM10 and PM2.5, 20.5 tons VOC and 255 tons NOx. Control equipment at SPC greatly reduces other pollutants like lead, ammonia, and sulfur dioxide.