RESULTS OF BIOSOLIDS FEASIBILITY AND FINANCIAL IMPLICATIONS

Capital Regional District (CRD) staff worked with existing biosolids thermal treatment vendors to investigate adding construction, renovation and demolition (CR&D) waste to the upcoming biosolids thermal pilots. While vendors indicated it was technically feasible to thermally treat CR&D waste using the technology being applied to the biosolids, it was determined that due to permitting and logistics, adding CR&D waste to the upcoming biosolids thermal pilot trials was not possible.

- Char Technologies: CharTech's pilot pyrolysis facility is scheduled to move to a new location in August 2022. Adding CR&D waste to the biosolids thermal pilot would require a permit amendment. There is not sufficient time to amend the permit and run a pilot test on combined CR&D waste before August. CharTech indicated that it has run previous trials on CR&D wood, and would be open to sharing this data with the CRD.
- Waste Management: Waste Management is confident that its pyrolysis system could pyrolyze CR&D waste, but is unable to pilot CR&D waste at its Redwood City, California facility due to operational and permitting reasons. Waste Management is open to further exploration of the pyrolysis of CR&D waste.
- Aries Clean Technologies: Aries is unable to pilot the gasification of CR&D waste at its Linden Biosolids Gasification Facility, as its permit does not allow for it. The pilot test for biosolids has been delayed due to commissioning issues at the facility.

Using CR&D waste as an alternative fuel in the Lafarge cement kiln in Richmond was investigated. The estimated cost to grind, transport and process CR&D waste at Lafarge is \$232/tonne.