Information from C. Gubala regarding Plasma Technology

The latest estimated costs of using plasma technology to treat biosolids for PFAS removal varies based on several factors, including the specific plasma system used, the scale of the operation, and energy costs. However, general estimates from recent research and pilot projects suggest:

• Capital Costs: A full-scale plasma treatment system runs between $5 million to $20 million, depending on capacity and technology sophistication.

• Operational Costs: Estimated at $500 to $1,500 per ton of biosolids treated, primarily driven by electricity consumption.

• Energy Consumption: Plasma arc and other high-energy plasma methods typically require 300 to 600 kWh per ton of biosolids, translating to significant electricity costs.

• Disposal Savings: Plasma treatment can reduce the need for landfill disposal or incineration, potentially offsetting costs.