

Kenai Peninsula Borough

Solid Waste Department

MEMORANDUM

TO: Brent Johnson, Assembly President
Members, Kenai Peninsula Borough Assembly

THRU: Mike Navarre, Mayor

FROM: Lee Frey, Solid Waste Director

DATE: October 14, 2022

RE: Central Peninsula Landfill – Landfill Gas to Energy Update

The Homer Electric Association (HEA) received grant from the Alaska Energy Authority for the KPB CPL Landfill Gas Combined Heat & Power Project in the amount of \$884,986 with HEA providing a match of \$221,247 for a total of \$1,106,223. These are design funds only and proposed for developing construction documents for a landfill gas collection system and a 1.6 MW generator capable of using landfill gas. The waste heat coming off the generator would be captured and directed to the leachate evaporator to further reduce gas consumption requirements.

Since HEA has received the grant, we have been in discussion about developing the scope of work for the project. I have been contacting other landfills in regards to their benefits and issues with similar projects using landfill gas for power generation and capturing the waste heat for evaporation. A major item in this project will be developing the agreement between the Borough and HEA in regards to the financial terms that make it a success for both parties. Although landfill and power company management structures vary across the country, I have been unable to find a group with a similar arrangement to our proposal.

We will continue to move forward with design of the project with the future goal of seeking funding for construction. We will also continue discussions on operational and financial terms that will make this future project a success for the Borough and HEA.

Please contact me for any questions or additional information.