

Kenai Peninsula Borough

Solid Waste Department

MEMORANDUM

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

THRU: Peter A. Micciche, Mayor *PM*
Brandi Harbaugh, Finance Director *BH*

FROM: Lee Frey, Solid Waste Director *LF*

DATE: July 20, 2023

RE: Ordinance 2023-19-01 Appropriating Funds from the General Fund to Purchase and Install Temporary Landfill Covers at Central Peninsula Landfill (Mayor)

Central Peninsula Landfill (CPL) has been dealing with the large inventory of leachate and has limited disposal options available. Delays in receiving grant funds for installation of a new leachate concentrator have further increased the need to limit leachate production at the site.

The Solid Waste Department is requesting \$700,000 to purchase and install temporary covers over MSW Cells 1 and 2. These covers would be 12 mil, reinforced liners to be sewn together and placed on the top and sides of the cells.

Current modeling shows that approximately 4.5 million gallons of leachate are generated in Cells 1 and 2 annually through precipitation falling on the cells and infiltrating into the waste. CPL currently minimizes infiltration through soil covers, slopes, ditching and seeding. While this approach is effective, it does not prevent all rain water from infiltrating. The temporary covers would be installed this fall, prior to snow fall to minimize infiltration during breakup and through the future rain events until operations return to these cells in approximately 2 years for completion of the cells and eventual final cover.

Leachate processing costs are variable at CPL and 20 cents per gallon would be a conservative number. If temporary covers reduce leachate generation by a conservative estimate of 2.5 million gallons, it would save approximately \$500,000 in leachate management costs per year. The covers would be covering approximately 520,000 square feet of area and one inch of rain over this area is approximately 325,000 gallons of water.

The Solid Waste Department recommends appropriating \$700,000 from the General Fund fund balance for the purchase and installation of temporary covers at the Central Peninsula Landfill.

Your consideration is appreciated.

FINANCE DEPARTMENT FUNDS VERIFIED	
Acct. No.:	<u>100.27910</u> Amount: <u>\$ 700,000</u>
By:	<u><i>LF</i></u> Date: <u>7/19/2023</u>