

Submitted by: Chair of the Assembly at the
Request of the Mayor
Prepared by: Solid Waste Services
For reading: October 14, 2008

CLERK'S OFFICE

APPROVED

Date: 10/14/2008

ANCHORAGE, ALASKA
AR No. 2008-246

**A RESOLUTION OF THE ANCHORAGE MUNICIPAL ASSEMBLY AUTHORIZING
SOLID WASTE SERVICES TO APPLY FOR A MATCHING GRANT FROM THE
ALASKA ENERGY AUTHORITY TO FUND THE DESIGN & CONSTRUCTION OF A
LANDFILL GAS-TO-ENERGY PLANT AT THE ANCHORAGE REGIONAL LANDFILL**

WHEREAS, Solid Waste Services operates the Anchorage Regional Landfill, producing quantities methane-rich landfill gas as a by-product of waste decomposition. The landfill gas represents a significant energy resource to the Municipality as a renewable energy source; and

WHEREAS, during the 2008 legislative session, the Alaska State Legislature established a renewable energy grant program, administered through the Alaska Energy Authority, to provide funding for development of renewable energy projects including power generation from landfill gas; and

WHEREAS, Solid Waste Services intends to apply for \$3,700,000 in grant monies as matching funding to design and construct a power generating plant with a current estimated engineering cost of \$7,400,000.

NOW, THEREFORE, the Anchorage Assembly resolves:

Section 1. Solid Waste Services is authorized to apply for a grant of \$3,700,000, as match funding for the design and construction of a power generating plant with an estimated engineering cost of \$7,400,000.

Section 2. The Director of Solid Waste Services is authorized to be the named point-of contact for the grant application and is authorized to represent the Municipality for purposes of this application, except that in accordance with Municipal policies the grant application must be approved by the Municipal Manager.

Section 3. The Municipality of Anchorage is in compliance with all federal, state local laws related to existing credit and federal tax obligations.

Section 4. This resolution shall be effective immediately upon passage and approval by the Assembly.

PASSED AND APPROVED by the Anchorage Assembly this 14th day of October, 2008.

ATTEST:



Municipal Clerk


Chair of the Assembly

MUNICIPALITY OF ANCHORAGE

ASSEMBLY MEMORANDUM

No. AM 704-2008

Meeting Date: October 14, 2008

From: MAYOR

**Subject: A RESOLUTION OF THE ANCHORAGE MUNICIPAL ASSEMBLY
AUTHORIZING SOLID WASTE SERVICES (SWS) TO APPLY FOR A
MATCHING GRANT FROM THE ALASKA ENERGY AUTHORITY TO
FUND THE DESIGN & CONSTRUCTION OF A LANDFILL GAS-TO-
ENERGY PLANT AT THE ANCHORAGE REGIONAL LANDFILL (ARL)**

In 2008, the Alaska State Legislature passed Alaska Statute 42.45.045, establishing a Renewable Energy Grant Recommendation program to provide funding to renewable energy projects throughout Alaska. One of the eligible technologies is power production from landfill gas. Application for this grant program requires an Assembly resolution, authorizing submission of the grant application and identifying a point of contact within the Municipality who is authorized to submit the application. This Assembly Resolution (AR) is requested to fulfill these application requirements.

SWS has actively collected landfill gas from the ARL for two years. The landfill produces over 1,000 cubic feet of gas per minute; the gas is currently flared. This flow is adequate to fuel a generating plant with a capacity of between 3 and 4 megawatts (MW) of electrical power. Gas production rates are expected to double over the active life of the landfill. While technically viable, development of a commercial power plant using conventional financing is marginally economical due to low energy costs in Southcentral Alaska and limited potential buyers of power near the landfill. With the addition of grant funds, an economically viable project can be developed.

SWS reevaluated the economics of a landfill power plant, assuming an installed capacity of 3.2 MW and a power sales price of \$0.05834 per kilowatt-hour (kWh); the current non-firm avoided power cost published in Chugach Electric Association Tariff Sheet 97. With 50 percent grant funding and conventional private financing for the balance, this project has an internal rate of return of 17.5%, and a simple payback period of five years.

The estimated cost for design, permitting and construction of the plant is approximately \$7,400,000. With this AR, SWS is authorized to request a grant of \$3,700,000 from the Renewable Energy Grant program; the remainder of the funds will be supplied by SWS or borrowed from conventional lenders. SWS plans to partner with a development entity for design, construction and operation of the facility, and consider an equity position with this partner if a mutually beneficial agreement can be reached.

**THE ADMINISTRATION RECOMMENDS APPROVAL OF THE RESOLUTION
AUTHORIZING SWS TO APPLY FOR A MATCHING GRANT FROM THE ALASKA
ENERGY AUTHORITY TO FUND THE DESIGN & CONSTRUCTION OF A LANDFILL
GAS-TO-ENERGY PLANT AT THE ARL.**

Prepared by: Mark G. Madden, Director, Solid Waste Services
Concur: James N. Reeves, Municipal Attorney
Concur: Michael K. Abbott, Municipal Manager
Respectfully submitted: Mark Begich, Mayor

Content ID: 006964**Type:** AR_AllOther - All Other ResolutionsA RESOLUTION OF THE ANCHORAGE MUNICIPAL ASSEMBLY
AUTHORIZING THE SOLID WASTE SERVICES DEPARTMENT TO APPLY**Title:** FOR A MATCH GRANT FROM ALASKA ENERGY AUTHORITY TO FUND
DESIGN AND CONSTRUCTION OF A LANDFILL GAS-TO-ENERGY PLANT AT
THE ANCHORAGE REGIONAL LANDFILL.**Author:** pruittns**Initiating
Dept:** SWS**Review
Depts:** Legal, Finance**Keywords:** GAS-TO-ENERGY**Date** 10/8/08 1:53 PM**Prepared:****Director
Name:** Mark G. Madden**Assembly
Meeting
Date:** 10/14/08

Workflow Name	Action Date	Action	User	Security Group	Content ID
Clerk_Admin_SubWorkflow	10/10/08 10:43 AM	Exit	Joy Maglaqui	Public	006964
MuniMgrCoord_SubWorkflow	10/10/08 10:43 AM	Approve	Joy Maglaqui	Public	006964
MuniManager_SubWorkflow	10/9/08 3:35 PM	Approve	Michael Abbott	Public	006964
Finance_SubWorkflow	10/9/08 1:51 PM	Approve	Nina Pruitt	Public	006964
Finance_SubWorkflow	10/9/08 1:50 PM	Checkin	Nina Pruitt	Public	006964
Legal_SubWorkflow	10/8/08 2:23 PM	Approve	Rhonda Westover	Public	006964
SWS_SubWorkflow	10/8/08 2:08 PM	Approve	Mark Madden	Public	006964
AllOtherARWorkflow	10/8/08 2:06 PM	Checkin	Patty Kilson	Public	006964
SWS_SubWorkflow	10/8/08 2:03 PM	Reject	Mark Madden	Public	006964
AllOtherARWorkflow	10/8/08 1:58 PM	Checkin	Patty Kilson	Public	006964