Bulk Fuel Systems Upgrades **FY2001 Request: $1,600,000**
Reference No: 32584

AP/AL: Appropriation **Project Type:** Health and Safety
Category: Health/Human Services
Location: Statewide **Contact:** D. Randy Simmons
House District: Statewide (HD 1-40) **Contact Phone:** (907)269-3000
Estimated Project Dates: 07/01/2000 - 06/30/2005

Brief Summary and Statement of Need:

To supplement expected Federal funds and local contributions for construction of new consolidated bulk fuel storage tank systems in rural Alaska.

Funding:	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	Total
Oil/Haz Fd	$1,600,000						$1,600,000
Total:	$1,600,000	$0	$0	$0	$0	$0	$1,600,000

☐ State Match Required ☑ One-Time Project ☐ Phased - new ☐ Phased - underway ☐ On-Going
0% = Minimum State Match % Required ☐ Amendment ☐ Mental Health Bill

Operating & Maintenance Costs:

	Amount	Staff
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	
Totals:	0	0

Additional Information / Prior Funding History:

Project Description/Justification:

Purpose of the Appropriation

Upgrading bulk fuel storage facilities in rural Alaska has become a core element of the AEA Rural Energy Program's (AEA) mission. There are approximately 1000 above-ground tank farms in 161 remote villages in rural Alaska. In most cases, oil fuels are the only realistic way to supply heat, power, and transportation in rural Alaska, and storage of these fuels throughout the winter is essential to the survival of these communities. Most of the rural tank farms were first established using second-hand equipment and with little regard to applicable standards and codes, thus the risk of soil and groundwater contamination is high.

This FY2001 budget request, in combination with other sources of funding, will be used:

o to fund construction costs for the bulk fuel upgrade projects which were designed in 1999 and 2000,

o to fund staff costs to administer and manage the bulk fuel upgrade construction projects.

Why the Upgrades are Necessary

Prior studies of tank farm conditions in rural Alaska reached the following conclusions:

· Over 90 percent of the tank farms had inadequate dikes to contain fuel spills.
· 80 percent had inadequate foundations, which leads to gradual tank movement and fuel leaks.
· 75 percent had improper piping systems with respect to joints and valves, the components most often associated with fuel leaks. Deficiencies included the widespread use of threaded pipe or rubber hose.

· 10 percent of the tanks were rusted or dented beyond repair.
· Over 90 percent did not have security fences.
· 25 percent were sited too close to a well, beach, or building, or within a flood plain.
· 20 percent exhibited electrical code violations.
· Almost all of the tank farms in rural Alaska are located near a river or coastline. As a result, fuel that leaks from these facilities readily finds its way to nearby water sources and damages marine habitat, fish, and wildlife. Fuel leakage into drinking water threatens public health. The State has already faced litigation rising from communities with evidence of deleterious health effects from drinking contaminated water.

AEA's bulk fuel upgrade projects result in code-compliant facilities on sites that are free from any prior fuel contamination. These new or upgraded facilities have the following characteristics:

· Secondary containment (typically, these are dikes) with impermeable liners and adequate capacity to contain fuel spills.

· New fuel tanks or refurbished tanks that have been cleaned, inspected, repaired and found suitable for continued service. The tanks will rest on properly sized and constructed foundations.

· Proper site location with respect to wells, beaches, buildings, and flood plains.

· New piping systems characterized by heavy gauge steel pipe, welded joints, steel valves, and aboveground access and visibility.

· Adequate security fences and lighting.

· Code-compliant electrical supply for lighting and pumps.

Impact on the State Operating Budget

These facilities will not be owned or operated by the State, therefore upgrade of these facilities does not directly affect the State operating budget. Since most of the rural tank farm owners do not have the funding to upgrade these facilities, let alone clean up contaminated soil and groundwater, the cost of clean up is likely to affect the State budget in the future. Prevention of additional leaks and spills is ultimately in the State's financial interest as the costs of remediation are generally far more expensive than the costs of preventing spills and leaks before they occur.

Project Selection Criteria

AEA's primary objective is to give priority to bulk fuel storage facilities that are in the worst condition. Over the last three years, AEA has built a detailed database of tank farm conditions and characteristics in 161 rural villages. Deficiencies in each tank farm have been scored with respect to site location, secondary containment, foundations, condition of tanks, condition of piping, electrical wiring, and overall life/health/safety risk. Based on this information, rural communities and tank farms have been ranked according to the level of these deficiencies. This is the starting point for project selection under the six-year plan that the AEA developed at the request of the Environmental Protection Agency. EPA has used our six-year plan as the basis for their funding of AEA projects over the last two years.

An additional factor in project selection is the availability of outside funding. For example, a number of communities and tank farm owners have been able to acquire federal funds for tank farm upgrades through the Indian Community Development Block Grants and Community Development Block Grants programs. As long as significant repair or replacement of bulk fuel storage facilities is needed, AEA tries to take advantage of these funding opportunities when they arise.

Other factors can also be considered under our six-year plan methodology, including average income level and community contribution and commitment.

Projected FY01 and FY02 Bulk Fuel Upgrade Expenditures and Funding

The projects listed below are currently in the design phase and will be presented to the Denali Commission for funding in FY01 and FY02:

Community	Cost
Nikolai	600,000
Kotlik	2,100,000
Chalkyitsik	600,000
Venetie	500,000
Rampart	500,000
Port Protection	150,000
Chignik Lagoon	500,000
Takotna	1,500,000
Red Devil	600,000
Point Baker	150,000
Larsen Bay	600,000
Diomede	1,400,000
Birch Creek	500,000
Old Harbor	600,000
Atka	1,000,000
Kongiganak	1,600,000
Crooked Creek	600,000
Aleknagik	400,000
Projected FY01 Construction	13,900,000
Togiak	3,000,000
Tununak	1,900,000
Buckland	2,200,000
Hoonah	2,605,000
Projected FY02 Construction	9,705,000
Total	$23,605,000

The following projects, listed in order of priority per AEA's deficiency rankings, are the next 10 bulk fuel projects to be considered for funding by the Denali Commission, the EPA and the State's oil hazard fund in FY02 and beyond:

Community	Projected Cost
Clarks Point	1,200,000
Chuathbaluk	650,000
Koyuk	1,899,360
Gambell	4,700,000
Sand Point	400,000
Huslia	400,000
Koyukuk	800,000
Nulato	3,000,000
Kokhanok	500,000
Egegik	2,100,000
Total	$15,649,360

The projected state and federal funding for bulk fuel upgrade projects in FY01 is as follows:

Funding Source	Amount
State Oil Hazard Fund	1,600,000
Federal Funds:	
Denali Commission	9,400,000
EPA	3,000,000

$ 14,000,000