The Relationship between Alaska's Class III Landfill Status and the USEPA Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia and its Potential Impact on Remote Alaska Native Tribes and Communities.

Synopsis: Alaska Tribal communities face potentially reduced safeguards from human health illness and environmental contamination for their permitted landfill facilities as a result of an exemption for Alaska communities from certain landfill standards under RCRA, the federal statute regulating solid waste. We put forth here that building on this exemption so that its unforeseeable "loose ends" do not cause undue adverse health impacts is reasonable. Such a potential need arises from recent changes in allowable activities under the Tribal General Assistance Program ("GAP") grants that fund the environmental programs of small Alaska communities, as described in the May 15, 2013 USEPA Guidance. Once implemented, the changes are anticipated to result in a disproportionate financial and environmental health impact on Alaska Tribes and the remote small Alaska communities they serve.

Background: Via a grant to the local Tribe, USEPA General Assistance Program (GAP) Grants fund environmental programs for approximately 170 small Alaska communities. The majority of communities rely heavily on Tribal Gap funds to carry out their solid waste management programs, including landfill operation, waste collection, and recycling. New policies were set forth in the May 15, 2013 USEPA Guidance on the Award and Management of General Assistance Agreements for Tribes and Intertribal Consortia ("the Guidance") that disallows nearly every non-administrative solid waste activity involving personnel time or waste handling:

"General costs of government services normally provided to the general public... are unallowable,....[including] ...trash collection, transportation, backhaul, and disposal services..." [see Section 1.4 of the Guidance]

A transition period through FY20 has since been granted to continue solid waste implementation activities while Tribes work to develop a means of financially sustaining their programs.

We propose here that Alaska Tribes and their communities are being disproportionately impacted by the new Guidance policies in comparison with Lower-48 Tribal communities, in large part due to a singular exemption from federal landfill standards allowed for Alaska remote and small communities under the Land Disposal Program Flexibility Act of 1996.

Recognizing unique Alaska Community circumstances, landfill engineering principles, and other reasons, in approving the State of Alaska's program under the federal Resource Recovery and Conservation Act (RCRA), the USEPA explicitly considered the State's less stringent rules for remote Alaska communities with populations under approximately 1,500 (See Fed. Reg. Jan 5 2000). They are the only communities in the United States where landfills may be unlined, wastes may be covered just 2-3 times per year (instead of daily), and many wastes may be burned without emissions treatment [See Alaska Statute Title 18 Chapter 60 for full rules].

Anticipated adverse impacts from the new GAP policy of greater severity to Alaska Native communities than Lower-48 Tribal communities can be grouped into three issues:

Collection Programs: Waste collection will be significantly decreased or eliminated in a substantial number of Alaska Native communities. The large majority of Waste Collection Programs currently carried out in Alaska Native Villages are subsidized or funded fully by Gap monies. Due to the small populations, the average monthly household collection fees of \$15 to \$25 would need to more than double to pay for a even a part-time program [Zender technical assistance & training data]. But the monthly utility cost for water alone is already over 5% of the MHI for many villages—and 5% is the maximum defined by the federal government as sustainable [numerous IHS/ANTHC reports].

Without Waste Collection, residents must self-haul. But Alaska Village residents face substantially greater health risks self-hauling to their sites than Lower-48 Tribal community residents because of the unique circumstances recognized in Alaska's regulations that exempt their landfills from the full set of higher RCRA standards.

- Their landfills are not engineered to retain leachate, waste contact is more likely because cover material is rarely applied, and residents must breathe undiluted and untreated toxic emissions from open waste burning.
- Alaska Village residents who visit their dumpsite are 2 to 3.7 times more likely to experience faintness, fever, vomiting, stomach pain, ear and eye irritation, headache, and/or numbness. The more often people visit the dump, the more likely they are to experience the symptoms [Gilbreath and Zender 2006].
- Further, with the exemption from daily cover material, the risk of disease transmission to others in the household is increased. Bacteria on boots and tires have been shown to track from dumpsite to homes and schools [Chambers et al 2009].

Landfill Operation: As with collection programs, the large majority of Alaska Native Villages use GAP funds to subsidize or wholly support a part-time operator to manage their site. Without a landfill operator or with reduced hours, Alaska communities face greater health and environmental risks than Lower 48 Tribes. Operators consolidate and compact landfills to minimize leachate and the landfill footprint. They separate out prohibited wastes from the burnstream and manage the untreated waste burning-- a role, again, that is unique to Alaska villages. With Alaska's unique landfill regulations, the loss of operators is anticipated to result in:

- A greater volume of leachate infiltrating to surrounding water bodies—contaminating drinking and subsistence water. In lined landfills, leachate infiltration is physically limited and relatively independent of operation. In unlined landfills, operator maintenance plays a significant role.
- Expanded landfill footprints encroaching dangerously close to town and critical waterways endangering residents and creating a substantial nuisance. Because of high road construction costs, Alaska landfills are located very close to residences.
- An increase in unauthorized burnbox use, presenting increased inhalation risks. Without an
 operator staffing the community burnbox, residents will light it themselves, increasing their
 own danger as well as the community's.
- An increase in open burning and toxic smoke exposure in general as residents try to fight the encroaching footprint by burning wastes.

Backhaul/Recycling: Backhaul refers to transporting wastes hundreds to thousands of miles to endrecycling destinations, most commonly by barge or plane. Most Tribes pay for backhaul of wastes from their community partially, or fully, with GAP funds. Tribal Communities do not have access to local recyclers or a regional landfill that accepts household hazardous wastes. Best health practices dictate shipping their e-wastes, lead-acid batteries, Freon, etc. out of the community because discarding them in an unlined landfill results in hazardous contaminants migrating with leachate to rivers, and surrounding areas. Tribal communities in the Lower-48 have at least one of two options; pay a relatively small amount of gas money to transport hazardous wastes out to a safe destination, or discard their wastes in a lined landfill where contaminants are kept from migrating off-property. Without GAP backhaul funding, we anticipate:

- An increase in hazardous wastes discarded in the landfill,
- An expansion of the landfill footprint due to scrap metal buildup, and
- An increase in toxicity of the waste burn emissions due to an increase in hazardous wastes being burned.

Conclusion: The new GAP policies proposed by USEPA will hurt Alaska Tribes and the communities that depend on them to carry out essential waste management practices, via an anticipated disproportionate financial and environmental health impact. These communities are under regulations that exempt them from certain standards of RCRA federal law, contributing to the adverse impact anticipated. Pursuit of an Alaska Tribe exception from the new GAP policy may be possible using this exemption as justification and, potentially, as implementation mechanism as well.