



RECYCLING COMMISSION MEETING

Wednesday, July 13, 2016, 5:30 p.m. – 7:30 p.m.

Noel Wien Library, Conference Room

AGENDA

1. CALL TO ORDER

2. ROLL CALL

3. APPROVAL OF CONSENT AGENDA

(Approval of Consent Agenda passes all routine items indicated by an asterisk (*) on the agenda. Consent Agenda items are not considered separately unless so requested, in which case the item is returned to the general agenda. Said item will be discussed prior to citizen comment period, or under New Business, at discretion of Chair)

A. *Approval of Agenda

B. *Approval of minutes of 04/13/16 meeting

4. MESSAGES

A. Chairman's comments

B. Communications to the Recycling Commission

I. Report on Total Reclaim Status – Becca Brado, Green Star of Interior Alaska

II. Report on FNSB Community Recycling Status – Jim Williams, Mayor's Office; Dan Sloan, Public Works Director; Bob Jordan, Solid Waste Manager

5. CITIZEN COMMENTS

(Note: our policy is to encourage public comment. All items on the agenda will be open for public comment unless otherwise noted. If you would like to comment on any agenda items and cannot stay until such items come up for consideration during the meeting, you may comment at this time. You may also suggest a future agenda item to the commission at this time. Each speaker is limited to 3 minutes, with 30 minutes total time allotted)

A. Agenda items

B. Items not on the agenda

6. UNFINISHED BUSINESS

A. Items on agenda scheduled for public hearing

B. Items on agenda not scheduled for public hearing.

7. NEW BUSINESS/ACTION ITEMS/PUBLIC HEARING ITEMS

A. Items on agenda scheduled for public hearing

B. Items on agenda not scheduled for public hearing

I. Discuss and act upon Application for Special Recycling Projects: Organic Waste Source Study dated 3/29/16, Rodney Guritz, Arctic Data Services, LLC **(PAGE 6)**

II. Discuss and act upon Application for Special Recycling Projects: Community Event Recycling dated 6/30/16, Rebecca Brado, Green Star of Interior Alaska **(PAGE 18)**

III. Discuss and act upon Application for Special Recycling Projects: Recycling Kicker Prize for UAF Arctic Innovation Competition dated 6/30/16, Tammy Tragis-McCook, University of Alaska Fairbanks (UAF), School of Management **(PAGE 27)**

8. COMMISSION MEMBER COMMENTS

9. ADJOURN

DRAFT MINUTES

Recycling Commission Meeting Wednesday, April 13, 2016, 5:30pm – 7:30pm Noel Wien Library Conference Room

1. CALL TO ORDER

2. ROLL CALL

Commissioners: Karl Monetti, Chairman; Ariane Staples; Jimmy Fox; Karl Hough; Frank Williams; Brett Parks

FNSB Staff: Bob Jordan, Manager, Solid Waste Division; Jane Steeves, Secretary

Liaisons: Van Lawrence, FNSB Assembly

Guests: Becca Brado, Green Star of Interior Alaska; Chris and Molly Hunter; Robert Shields, Alliance for Reason and Knowledge; Kayla MacDonald, Chena Power/K & K Recycling; David Weissman, Green Star of Interior Alaska, Design Alaska; Deb Hickok, Explore Fairbanks; Amanda Frank, KUAC; Mary Ann Nichols, Rachel Lee, Eric Breitenstein, Interested parties

3. APPROVAL OF CONSENT AGENDA

(Approval of Consent Agenda passes all routine items indicated by an asterisk (*) on the agenda. Consent Agenda items are not considered separately unless so requested, in which case the item is returned to the general agenda. Said item will be discussed prior to public comment period, or under New Business, at discretion of Chair.)

A. *Approval of Agenda -

MOTION: To approve as submitted.

MOVED: Brett Parks

SECONDED: Karl Hough

DISCUSSION: None

PASSED: Unanimously

B. *Approval of minutes of 02/10/16 meeting

Included in 3. A. above

4. MESSAGES

A. Chairman's comments –

I. Discuss FY6 Budget Status

- a. The Mayor has passed the FY17 budget request of \$134,150 on to the FNSB Assembly
- b. There will be an Earth Day celebration Saturday at Veterans' Park with a walk from 12pm-1pm.
- c. Rodney Guritz, Arctic Data Services, is out of town. No report this meeting.

B. Communications to the Recycling Commission:

I. Report on progress of shopping bags and outreach program – Becca Brado, Green Star of Interior Alaska.

- a. 5,000 reusable shopping bags were purchased with FNSB funding. The remaining 1,600 will be distributed at Fred Meyer's to celebrate Earth Day and at similar events throughout the summer. The bags are sturdy, but the size will be increased for any future purchases. "Reminder" vinyl car window clings are being distributed. Alaska Waste provided grocery list magnets with a reminder to take a reusable bag when shopping. See attached data sheets indicating increasing usage of reusable bags. Green Star will continue to gather data.

II. Report on K & K Recycling – Kayla MacDonald

Current projects and research were reviewed via power point:

- a. 55-kw screw expander: purposed to create power; pellets could be used for fuel.
- b. Genius Stirling Engine: a long-lived turn-key generator for use in remote areas; the first model will be in Fairbanks within a month.
- c. CO2 growth enhancement greenhouse: will be operating at Eielson to provide fresh vegetables. Oyster mushroom spores are being used to create CO2.
- d. Eielson: emissions from the power plant will be channeled through the greenhouse to enhance plant growth.
- e. Tomato growing technique: tomatoes are growing in sterilized glass and bio-char, the latter is carbon.

- f. Recycled asphalt project: road repair cold patch, holds its shape when compacted; works well for potholes, but too slick for large surfaces.
- g. Cardboard and plastic fuel pellets: small pellets and eco-bricks; looking to create a partnership with a company outside of Alaska to acquire EPA and air quality approvals, or will pursue same here in Fairbanks.
- h. Recycled Plastic Bail Trail: Soil Stabilization; bailed plastic has been buried in a dug trench to see if it works to stabilize permafrost damage; possible use for new roads and road repair; plastic doesn't produce leach ate and is approved by the FNSB.
- i. Papercrete Bricks: made of cement, paper and cardboard, and occasionally plastic; could be used for small paver stones, patios, flower boxes, smaller items; investigating water retention and structural failure due to same.
- j. Renewable Energy Fair: includes the building and the insulation of structures around the world using bailed recycled plastic, paper and cardboard.

The goal for the future is to use recycled materials locally to invest in the community. The company is looking for a building for central recycling and will pursue its own dreams, whether or not their RFP for central recycling is successful. Dialog is continuing relative to restarting recycling at Eielson AFB and there are plans to begin a dialogue with Fort Wainwright. The immediate intention is to begin accepting all plastics in the near future.

- III. Report on progress of RFP (Request for Proposal-Recycling Operator) - Bob Jordan
 - a. The RFI was issued late November 2015 and closed mid-December. A group has been working on a draft for an RFP which is expected to be issued no later than June 2016.
- IV. Report on Arctic Winter Games/Legacy Project recycling bins – Deb Hickok
 - a. The bins used for recycling at the Games were located at seven schools, Pioneer Park, Birch Hill, Morris Thompson Cultural and Visitors Center, etc.
 - b. Remaining funds include: \$35,000 from the Recycling Commission, \$10,000 from Fort Knox and \$20,000.00 legacy monies from the Games. There is an ad hoc committee working on the best distribution, preparing the culture to welcome recycling and ensuring current users are actually recycling before they receive more bins. The first call for applications went out in mid-March. Applications have been received from North Pole Middle School, the Carlson Center, and the Children's Museum. Applications are available for private sector purchase, and for schools and government/non-profit entities. Activity is stepping up to solicit more applications. Applicants are expected to provide an acceptable method of recycling the materials. The highest volume has been cardboard from the cabins in Pioneer Park. Storage has been built on site. Committed parents, teachers and students provide volunteer labor at the schools, which creates a recycling challenge when a dedicated person moves on. Bob Jordan will meet with Deb Hickok regarding the deadline of June 30, 2016, for use of FNSB funds.
- V. Demonstration on Zero Waste Alaska 3D printing – Chris Hunter, Alliance for Reason and Knowledge
 - a. Chris Hunter runs a lab with a particular interest in 3D printing. 3D printers can repeatedly process plastic with little material loss. 3D printer technology is still in its infancy but it is getting faster and better, using less power and becoming more precise. 3D printers bypass machine shop processes. The Navy is manufacturing most things in a full machine shop on board ships faster and cheaper than shipping items from source. The same process could be used in the villages. 3D printers will allow for manufacture in the villages and remote areas. Students in villages are learning how to use them now. The groundwork is being laid. Since most items have a number and a triangle indicating the materials used in manufacture, 3D printer use is best supported by central recycling.

5. CITIZENS' COMMENTS

(Note: our policy is to encourage public comment. All items on the agenda will be open for public comment unless otherwise noted. If you would like to comment on any agenda items and cannot stay until such items come up for consideration during the meeting, you may comment at this time. You may also suggest a future agenda item to the Commission at this time. Each speaker is limited to 3 minutes, with 30 minutes total time allotted.)

A. Agenda items

None

B. Items not on the agenda

Robert Shields noted that Earth Day will be featured at UAF, including vendor booths, on Friday, April 23rd. A monologue on Nikola Tesla will be presented at Raven Landing the same day. In addition, there will be an Earth Day presentation at in the Schaible Auditorium on campus on Sunday.

Mary Ann Nichols, Raven Landing, shared that recycling is happening on each floor of the complex. Bins are provided for plastics, paper and cardboard, aluminum, batteries and electronics, toner cartridges, solid foam, prescription pill bottles, etc. The pill bottles are sent to Africa to be used in lieu of paper packaging of prescriptions.

6. UNFINISHED BUSINESS

A. Items on agenda scheduled for public hearing

None

B. Items on agenda not scheduled for public hearing

None

7. NEW BUSINESS/ACTION ITEMS/PUBLIC HEARING ITEMS

A. Items on agenda scheduled for public hearing

None

B. Items on agenda not scheduled for public hearing

I. Discuss and act upon Application for Special Recycling Projects, Green Star of Interior Alaska (GSIA) Community Recycling Program

- a. The application requests \$62,150, the remaining funds in the Commission's 2016 budget, to take over the recycling activity at the Fairbanks Rescue Mission, which will cease June 30, 2016. - Becca Brado and David Weissman presented.

MOTION: To accept the application as submitted

MOVED: Jimmy Fox

SECONDED: Ariane Staples

DISCUSSION: GSIA will assume the Mission recycling activity until the FNSB is ready. Rodney Gaskins will consult during the takeover; support job shadowing and sell selected equipment to GSIA. The potential site is 1200 Wells Street – one building containing two warehouses and a compactor. The owners are motivated sellers and willing to work with GSIA to possibly rent or purchase. Naming rights could lower the price significantly. This centrally located building could potentially save the cost of construction of a new recycling center although some repairs are necessary. Dialog with ALPAR indicates a potential partnership with GSIA will be in place by July 1, 2016. The goal is to create *no interruption of service*. There can be no risk of shutting down recycling and losing the confidence of the community. A longer term goal is to create a recycling partnership with Fort Greely.

PASSED: Unanimously

II. Discuss and act upon Application for Approved Recycler, (GSIA) Community Recycling Program

- a. The application requests an additional \$25,000, ear-marked for avoided costs, to fund the take-over of the current Fairbanks Rescue Mission recycling activity. Becca Brado and David Weissman presented.

MOTION: To accept the application as submitted

MOVED: Brett Parks

SECONDED: Karl Hough

DISCUSSION: This change-over will parallel the RFI/RFP process to create central recycling. The Mission will deliver items to GSIA rather than to the Mission. GSIA could reach out to Alaska Waste to deliver cardboard as soon as space is available. The intent is to being bailing and shipping as soon as possible. GSIA hopes to triple the current recycling with the increase in space.

PASSED: Unanimously

MOTION: To extend the meeting until all proposals are heard.

MOVED: Ariane Staples

SECONDED: Brett Parks

DISCUSSION: None

PASSED: Unanimously

III. Discuss and act upon Alliance for Reason and Knowledge

a. Zero Waste Alaska – Phase One: Education

b. Robert Shields presented. The \$20,000 application proposes to make a one half-hour film about the dumpster diver community in Fairbanks. The film would be created by Alaskans for Alaskans. The intent is to inspire entrepreneurs to generate new ideas using reclaimed materials obtained from decentralizing recycling to stimulate economic development. The film would be posted online and shown in local venues. The difference from similar films is local stories would make the connection.

MOTION: To accept the proposal as submitted

MOVED: Karl Hough

SECONDED: Brett Parks

DISCUSSION: Decentralized recycling does not meet the current goals of the Recycling Commission

FAILED: Unanimously

c. Zero Waste Alaska – Phase One: Empowerment

d. Robert Shields presented. The \$20,000 application proposes collaboration with the Recycling Commission to hold a one-day recycling fair to enable local recyclers to display their products. The core idea is to offer prizes for the best ideas for business start-ups.

MOTION: To accept the proposal as submitted

MOVED: Karl Hough

SECONDED: Ariane Staples

DISCUSSION: The proposal is not timely. Better to wait until after the centralized recycling is in place and hold a fair with a significantly greater financial investment.

FAILED: With a qualified 'no' vote from the Chairman, relative to the timing issue.

MOTION: To extend the meeting to 8:45

MOVED: Jimmy Fox

SECONDED: Brett Parks

DISCUSSION: None

PASSED: Unanimously

e. Zero Waste Alaska – Phase One: Enrichment

f. Robert Shields presented. The \$10,000 application proposes updating the recycling report that was asked of PDC to include more up-to-date options than the two that were addressed

MOTION: To accept the proposal as submitted

MOVED: Jimmy Fox

SECONDED: Ariane Staples

DISCUSSION: The Commission is interested in gathering additional information not included in the PDC report. A report similar to the composting study might be helpful.

FAILED: The Chairman voted 'yes'. All other Commissioners voted 'no'.

8. COMMISSION MEMBER COMMENTS

Karl Hough expressed thanks from the Recycling Commission to Robert Shields for his submissions and oral presentation.

9. ADJOURN

MOVED: Karl Hough

SECONDED: Ariane Staples

APPROVED: Unanimously

March 29, 2016

Chairman, Recycling Commission
c/o Solid Waste Manager
Fairbanks North Star Borough
Solid Waste Division
455 Sanduri St.
Fairbanks, AK 99701

Attn: Karl Monetti and Commissioners

Proposed Special Project, Organic Waste Source Study

In November 2015, we submitted a Composting Feasibility Study to the Fairbanks North Star Borough (FNSB). In this study, we reviewed various technologies proven successful for composting municipal solid waste organics (MSWO), prepared case studies of several existing Alaskan composting operations, and analyzed several alternatives (including cost estimates) for composting MSWO in the FNSB.

In Section 7.0 of our report, we identified several data gaps that were discovered in the course of our research. The following critical questions remain unanswered:

- What are the anticipated sources, quality, and volumes of MSWO feedstocks realistically available (recoverable) in the FNSB?
- What are the current costs of disposing of MSWO, both to private generators and the FNSB?
- What is the demand in the FNSB for a premium bulk compost, and what bulk rate will the market support?

First, there is significant uncertainty regarding the volume and quality of various categories of MSWO generated in the FNSB. Most recycling plans use nation-wide averages for waste composition and recovery rates, published by the US Environmental Protection Agency (EPA). Nationwide averages are likely unrealistic for lawn waste in the FNSB given the short growing season. Likewise, recovery rates for MSWO are highly variable and dependent on factors such as whether the state or municipality has enacted a green-waste disposal ban (as have about half of the Lower-48 states). Nation-wide averages may not be appropriate for planning a MSWO composting program in the FNSB, and more realistic estimates should be obtained.

Second, the cost of current means of disposing MSWO should be quantified, as this is critical in evaluating the cost of any alternative. The cost of landfilling waste can be approximated by the landfill's tipping fee. Waste

entering the landfill from FNSB residents represents a cost to the FNSB; waste entering the landfill from a paying commercial entity represents revenue. Additionally, there are significant costs to the FNSB for hauling waste collected at transfer sites in the solid waste collection district (SWCD), and there are costs to the City of Fairbanks for curbside collection within city limits. There are also costs to private businesses (e.g. restaurants, grocery stores) for commercial waste hauling and disposal. The proportion of MSWO entering the landfill originating from these various generators is largely unknown. Quantifying the cost to the FNSB is important when proposing alternative means of disposal (e.g. composting), and quantifying the cost to the City and private generators may be useful in designing an appropriate collection program.

Third, and equally important, is the demand for high quality bulk compost within the FNSB. Unlike with commodity-based recycling, one cannot rely on outside market prices as the basis of an economic analysis. Since compost is a relatively expensive product to ship in comparison to its market value, a local composting operation should not count on outside markets for a significant portion of revenue. Thus, it is important to have a good estimate of existing demand for locally-produced compost. As noted in our feasibility study, a successful operation would have to distinguish itself from the biosolids compost produced by Golden Heart Utilities (GHU) so as not to compete with their rock-bottom cost. The target market for MSWO compost would likely be small produce farms (e.g. community supported agriculture), as well as home gardeners. The budding marijuana industry may represent a significant future market, though this market has yet to fully develop.

Arctic Data Services, LLC (ADS) hereby proposes to conduct research to fill these data gaps and facilitate a better understanding of the potential for a community-wide composting program. This work will build on that presented in our feasibility study, and should prove valuable in planning and decision-making as the FNSB moves into a new phase of sustainable solid-waste management. Similar to the 2015 Recycling Plan & Analysis conducted by PDC Inc. Engineers, but including locally appropriate waste volumes and cost estimates for MSWO, this study should lay the groundwork for development of a successful composting program for the FNSB.

Scope of Services

Our research will include the following data collection efforts, aimed to fill each of the above-described data gaps. Arctic Data Services, LLC and subcontractor Information Insights, Inc. will work collaboratively to develop consistent survey tools (questionnaires) to improve comparability across data collected. Data from each survey effort will be analyzed and presented in a project report.

Task 1 - Residential Surveys

The primary goal of conducting residential surveys will be to estimate volumes of residential MSWO, both in the City and outside city limits (the SWCD), and identify the current means of disposal for residential MSWO (e.g. determine what proportion of residential MSWO is currently composted in backyard piles, vs. what proportion

makes its way to the landfill). We will also gauge public support for and knowledge of composting, similar to the 2012 Community Support Survey for recycling, evaluating willingness to participate in a community-wide composting program.

We will subcontract Information Insights, Inc. to conduct phone and internet surveys of FNSB residents. Information Insights conducted the 2012 Community Support Survey for the recycling commission, and has extensive experience with similar data-collection efforts. Phone surveys tend to capture older, more conservative respondents; internet surveys tend to capture a younger, more progressive population. Only phone surveys can provide randomly sampled responses, and thus statistically significant results. Conducting both phone and internet surveys will produce two slightly different data sets that complement each other and may help produce a more accurate picture of residential MSWO generation. A draft outline of the survey is included as an attachment to this proposal; specific survey questions and multiple-choice responses will be developed during project implementation, and may differ somewhat from the draft outline.

Task 2 - Commercial Generator Survey

Arctic Data Services, LLC will conduct a survey of local businesses and institutions that generate significant quantities of MSWO (both food waste and lawn waste). These include:

- grocery stores,
- restaurants and other commercial kitchens,
- private landscapers (including those serving Fort Wainwright and Eielson),
- FNSB schools, and
- FNSB parks (landscaping/groundskeeping).

During the surveys, we will be collecting much of the same information as for the residential surveys, with the goal of obtaining estimates of the volume of MSWO generated commercially. We will include questions to ascertain the current costs of MSWO waste hauling and disposal to commercial generators. Commercial generator surveys will also include open-ended questions aimed at identifying potential collection scenarios that would meet the needs of commercial generators.

A list of major commercial generators will be compiled, and our survey will target a range of different generators. Additional categories of generators may be identified during the project, and will be included if deemed significant to total MSWO generation in the FNSB. The survey will largely be conducted by phone; however, we may include several in-person surveys or follow-up interviews to add depth to survey responses. Our cost estimate is based on a maximum of 50 completed commercial-generator surveys.

Task 3 - Farmer Survey

We will subcontract Jessica Guritz (Director, Down to Earth Consulting) to conduct a survey of farmers in the FNSB that generate agricultural waste and/or have a demand for high-quality bulk compost. Ms. Guritz has in-depth knowledge of the Fairbanks farming community, and existing connections to many Fairbanks-area farmers. The survey will use a questionnaire similar to those used for the residential and commercial generator surveys. The goal will be to estimate volumes and quality of agricultural waste, but with additional questions to ascertain the potential demand for high-quality bulk compost. Estimating the demand for high-quality bulk compost among farmers is critical, as described above and in our 2015 Composting Feasibility Study. A number of larger farms producing hay, straw, and other crops with the potential for large waste volumes will be targeted, along with smaller farms (including CSAs) that generate less waste but comprise a potential market for high-quality bulk compost. As with the commercial generator survey, we may include several follow-up interviews to add depth to survey responses. Our cost estimate is based on a maximum of 25 completed farm surveys.

Task 4 - Data Analysis and Reporting

Prior to reporting, we will work with the FNSB solid waste division and Alaska Waste to review any records with additional waste-characterization or volume information, ideally supplementing survey data. We will analyze survey data, summarizing responses in the context of the data gaps discussed above. The report will include rough estimates of the quantity of MSWO generated by residential, commercial, and agricultural generators, along with a qualitative evaluation of the quality of feedstocks. The report will include an evaluation of current costs to the FNSB, the City of Fairbanks, and private generators for hauling and disposal of MSWO within the FNSB. It will also include a rough estimate of the demand for high-quality bulk compost from local gardeners and Fairbanks-area farms. It is not feasible to calculate recovery rates based on survey data, but we will summarize general willingness to participate and public support for community-wide composting in the FNSB, which could be a useful for leveraging policy changes in the future.

The report will be presented in draft format to the FNSB recycling commission and solid waste division for comment. Following receipt of comments, we will revise the report appropriately and provide a final version to the FNSB contract manager.

Schedule

Our proposed schedule for this project, assuming authorization by June 30, 2016, includes the following milestones:

Residential Surveys	by November 30, 2016
Commercial Generator Interviews	by December 31, 2016
Farmer Interviews	by December 31, 2016
Draft Report	January 31, 2016
Final Report	within 30 days of comments

Conducting the surveys and interviews in early winter will likely allow for a much higher response rate, due to the summers being a busy time for residents, business, and farmers alike. Response rates are critical for obtaining statistically relevant findings.

Project Team and Resources

ADS owner and principal chemist Rodney Guritz will manage this project, conduct the commercial-generator interviews, and prepare the final report. Mr. Guritz has experience with recycling and solid-waste management in the FNSB, having served as a member of the FNSB recycling commission from April 2013 to October 2014 and as the FNSB's consultant for the 2015 Composting Feasibility Study. ADS has sufficient "financial resources in proportion to the business purpose" and appropriate insurance (including professional liability coverage), and can provide documentation upon request during contract negotiation.

Subcontractor Information Insights has a diverse team with extensive experience conducting surveys of this nature, including one in 2012 for the FNSB recycling commission. Subcontractor Jessica Guritz has experience and existing communication with many Fairbanks-area farmers, and a strong background in natural resource management.

Terms and Fees

We understand terms would be negotiated in a contract between the FNSB Mayor's Office and ADS, should the Recycling Commission approve this proposal. The project cost estimate for this study is a flat-fee of **\$30,000** presented in detail in the attached Project Cost Estimate. The flat fee will be billed in four phases, reflecting the four tasks described above. A brief update on project progress will be presented to the contract manager and the recycling commission chairperson upon completion of each task.

Sincerely,

Arctic Data Services, LLC



Rodney Guritz
Owner and Principal Chemist

Attachments:

Project Cost Estimate
Draft Survey Outline
Application for Special Recycling Projects Pursuant to FNSBC 8.12.034
Alaska Business License #997300, Arctic Data Services, LLC

Arctic Data Services LLC

Client | Fairbanks North Star Borough
Project | Organic Waste Source Study
Date | March 29, 2016

Project Cost Estimate

Task 1 - Residential Survey

Information Insights, Inc.

Survey tools development	\$	2,000	
Online survey	\$	1,000	
Telephone survey	\$	7,500	
Administration & markup	\$	1,260	
Task 1 - Subtotal			\$ 11,760

Task 2 - Commercial Generator Survey

Arctic Data Services, LLC

Coordination and sample selection	\$	1,536	
Survey	\$	4,800	
Data compilation and analysis	\$	1,920	
Task 2 - Subtotal			\$ 8,256

Task 3 - Farmer Survey

Down to Earth Consulting

Coordination and sample selection	\$	800	
Survey	\$	1,250	
Data compilation and analysis	\$	1,000	
Administration & markup	\$	434	
Task 3 - Subtotal			\$ 3,484

Task 4 - Reporting

Arctic Data Services, LLC

Records review (FNSB landfill and Alaska Waste)	\$	2,000	
Draft report	\$	4,000	
Final report	\$	500	
Task 2 - Subtotal			\$ 6,500

Project total: **\$ 30,000**

This cost estimate is subject to the terms and conditions of the proposal to which it is appended, as well as any contracts or service agreements that are in place between Arctic Data Services, LLC and the Client at the time of authorization. Arctic Data Services, LLC will not exceed the project total without prior authorization by the Client. The costs described above will be invoiced monthly on a time-and-materials basis.

Draft Survey Outline

Organic Waste Source Study

The following sections outline categories or specific topics for a survey of FNSB residents. Specific questions and multiple-choice responses will be developed during project implementation. Similar surveys will be developed for commercial generators and farmers.

1. Demographics

- a. Gender
- b. Age (must be 18+)
- c. Marital status
- d. Ethnicity/race
- e. Education
- f. Employment status

2. Household Information

- a. Location (city or collection district)
- b. Size of lot
- c. Number of people in household
- d. Household income
- e. Own or rent
- f. Animals?

3. Education and Resources about Composting

- a. How familiar are you with composting?
- b. Do you know where to look for more information about composting?

4. Food Waste

- a. Current food waste disposal
- b. Percentage of food waste entering garbage
- c. Composition/quality of food waste

5. Yard and Garden Waste

- a. Do you have a lawn or a maintained yard area? If yes...
 - i. Size
 - ii. Current disposal method
- b. Do you have a garden?
 - i. Size
 - ii. Current disposal method

6. Other Organic Wastes

- a. Animal wastes? (if yes to 2.f.)
 - i. Current disposal method
- b. Do you generate more than a truckload of brush or waste wood in a year?
 - i. Current disposal method
- c. Human waste?
 - i. Current disposal method (city sewer / septic / outhouse / composting toilet)

7. Current Organics Reuse/recycling

- a. Do you compost?

- i. Composting technique
 - ii. Use of finished product
 - b. Do you have worms? (vermiposting)
 - a. Proportion of food waste fed to worms
 - c. Do you feed food waste to pets?
 - d. Do you feed food waste to livestock?
 - e. Any other reuse or recycling of organic wastes?
- 8. Willingness to Participate (respondents in solid waste collection district)**
 - a. Do you recycle?
 - i. Recycler
 - ii. Materials sorted
 - iii. Frequency
 - b. For current composters
 - i. Would you continue composting if the FNSB accepted organics at a central recycling facility?
 - ii. Would you continue composting if the FNSB accepted organics (for composting) at the transfer sites and landfill?
 - iii. What do you gain by composting? (open-ended)
 - c. For non-composters
 - i. Barriers to backyard composting (time / space / effort / priority)
 - ii. Willingness to separate food waste for dropoff at
 - 1. Centralized recycling facility
 - 2. Transfer sites and/or landfill
 - iii. (with lawns) Willingness to separate yard waste for dropoff at
 - 1. Centralized recycling facility
 - 2. Transfer sites and/or landfill
- 9. Demand for Compost**
 - a. Have you ever purchased compost? (golden heart / bagged premium / other)
 - b. Potential use of compost (garden / landscaping / farming / other)
 - c. Estimate of individual demand (volumes at various prices)

For Office Use: Received: Date: _____ By: _____
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**APPLICATION FOR SPECIAL RECYCLING PROJECTS
PURSUANT TO FNSBC 8.12.034**

Please fill in all sections of this sheet. All starred items are required before the Recycling Commission will evaluate your proposal. Other relevant documents and your "Plan" should be attached.

1. * **COMPANY/ORGANIZATION NAME:** Arctic Data Services, LLC

2. * **TITLE OF PROPOSAL:** Organic Waste Source Study

3. * **BRIEF SUMMARY OF PROPOSAL:**

Conduct a waste source analysis for municipal solid waste organics (MSWO) in the FNSB, and evaluate public support for composting. This will include a combination of phone, internet, and in-person surveys of various generators (residential, commercial, agricultural) as described in the attached proposal.

4. * **NAME(S) AND TITLE OF PRINCIPALS OF COMPANY/ORGANIZATION:**

Name	Title
<u>Rodney Guritz</u>	<u>Owner and Principal Chemist</u>
_____	_____
_____	_____

5. * **CONTACT PERSON:**

Name: Rodney Guritz
Address: PO Box 345
Ester, AK 99725
Phone: 907-457-3147
Email: rodney@arcticdataservices.com

6. * **VALID ALASKA BUSINESS LICENSE:**

Copy attached: Yes No

In addition, a valid City Business License is required if doing business within the City boundaries. Attached: Yes No Not applicable

7. * **PROOF OF FINANCIAL RESOURCES IN PROPORTION TO THE BUSINESS PURPOSE** (additional pages may be attached or expound upon this in your business plan):

See proposal.

8. * **AUTHORIZED SITE APPROVAL BY DEC AND FNSB, IF APPLICABLE.**

(attach copies of documentation)

Not applicable.

- 9. * Submission of a Business Plan to Show (please attach)** See attached proposal.
- A. A summary of the proposed project and its anticipated impacts
 - B. Project team (who will carry out the work)
 - C. Anticipated audience (if an outreach project)
 - D. Project timeframe, including any deadlines that must be met
 - E. Consistency with the Borough's overall recycling plan
 - F. How will you demonstrate success: are there measurable goals, and what methods will be used to evaluate them?
 - G. Any additional information, specifications, contracts, etc., that will assist the Recycling Commission in evaluating your proposal. You may include in your Plan expansions or explanations of your answers on sections of this form.

10. * ARE YOU ASKING FOR BOROUGH FUNDING? Yes No

If Yes:

A. How much? \$ 30,000

B. For what time period? July 1, 2016 to June 30, 2017

C. One time or ongoing? one time

D. What are estimated monetary needs for trial (first) period? \$ 30,000

E. What are estimated monetary needs for further time-periods? \$ 0

(NOTE: Approval of this plan at this level does NOT guarantee Borough funding)

11. * HOW DO YOU SEE YOUR PROPOSAL AFFECTING THE OVERALL IMPACT ON THE GOAL OF RECYCLING AND REDUCTION OF SOLID WASTE GENERATED IN THE BOROUGH?

This research will allow us to establish local estimates of MSWO quantities instead of
relying on nation-wide averages, which are not appropriate due to our short growing
season. It will allow us to gauge public support for composting, a potential tool for
leveraging policy action. Organic waste may be as much as 40% of the total waste
stream, so reducing, reusing, and recycling this waste is critical in meeting long-term
diversion rate goals. Composting is the most appropriate solution given the size of our
community, and this research will allow for design of an effective solution to compost
MSWO on a community-wide scale.

Date: 3/29/2016

Print Name: Rodney Guritz

Alaska Department of Commerce, Community, and Economic Development

Division of Corporations, Business and Professional Licensing

P.O. Box 110806, Juneau, Alaska 99811-0806

This is to certify that

ARCTIC DATA SERVICES, LLC

PO BOX 345 FAIRBANKS AK 99725

owned by

ARCTIC DATA SERVICES, LLC

is licensed by the department to conduct business for the period

December 31, 2015 through December 31, 2016

for the following line of business:

54 - Professional, Scientific and Technical Services



This license shall not be taken as permission to do business in the state without having complied with the other requirements of the laws of the State or of the United States.

This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.

Chris Hladick

For Office Use:
Received:
Date: _____
By: _____

APPLICATION FOR SPECIAL RECYCLING PROJECTS PURSUANT TO FNSBC 8.12.034

Please fill in all sections of this sheet. All starred items are required before the Recycling Commission will evaluate your proposal. Other relevant documents and your "Plan" should be attached.

1. * **COMPANY/ORGANIZATION NAME:** Green Star of Interior Alaska

2. * **TITLE OF PROPOSAL:** Community Event Recycling

3. * **BRIEF SUMMARY OF PROPOSAL:**

Green Star of Interior Alaska seeks funding to underwrite expenses associated with providing special event recycling services at community events. Our special event recycling program targets events that are attended by a large sector of the FNSB population, produce a large amount recyclable waste material in a short period (i.e. on site selling beverages in containers) and lack recycling options on location. Green Star's special events recycling program benefits the FNSB by decreasing the amount of materials sent to the landfill and demonstrates our community's commitment to environmental stewardship.

* **NAME(S) AND TITLE OF PRINCIPALS OF COMPANY/ORGANIZATION:**

Name	Title
<u>Becca Brado</u>	<u>Executive Director</u>
<u>Andrea Miller</u>	<u>Board President</u>

4. * **CONTACT PERSON:**

Name: Becca Brado
Address: P.O. Box 82391
Fairbanks, AK 99708
Phone: 907-452-4152
Email: Becca@iagreenstar.org

5. * **VALID ALASKA BUSINESS LICENSE:**

Copy attached: Yes No

In addition, a valid City Business License is required if doing business within the City boundaries. Attached: Yes No Not applicable

6. * **PROOF OF FINANCIAL RESOURCES IN PROPORTION TO THE BUSINESS PURPOSE** (additional pages may be attached or expound upon this in your business plan):

Green Star is an independent nonprofit 501(c)(3) organization and its finances are a matter of public record. Financial Statement for the year 2014 will be provided upon request.

7. * **AUTHORIZED SITE APPROVAL BY DEC AND FNSB, IF APPLICABLE.**

(attach copies of documentation)

Not Applicable

8. * Submission of a Business Plan to Show (please attach)

- A. A summary of the proposed project and its anticipated impacts
- B. Project team (who will carry out the work)
- C. Anticipated audience (if an outreach project)
- D. Project timeframe, including any deadlines that must be met
- E. Consistency with the Borough's overall recycling plan
- F. How will you demonstrate success: are there measurable goals, and what methods will be used to evaluate them?
- G. Any additional information, specifications, contracts, etc., that will assist the Recycling Commission in evaluating your proposal. You may include in your Plan expansions or explanations of your answers on sections of this form.

9. * ARE YOU ASKING FOR BOROUGH FUNDING? Yes No

If Yes:

A. How much? \$ 11,250

B. For what time period? FY17: 7/1/2016 – 6/30/2017

C. One time or ongoing? Ongoing

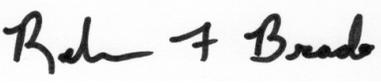
D. What are estimated monetary needs for trial (first) period? N/A: established program.

E. What are estimated monetary needs for further time-periods? \$ To be determined.

(NOTE: Approval of this plan at this level does NOT guarantee Borough funding)

10. * HOW DO YOU SEE YOUR PROPOSAL AFFECTING THE OVERALL IMPACT ON THE GOAL OF RECYCLING AND REDUCTION OF SOLID WASTE GENERATED IN THE BOROUGH?

Date: June 30, 2016

Signature: 

Print Name: Rebecca Brado

Green Star's Special Event Recycling Program Business Plan

A. A summary of the proposed project and its anticipated impacts

Green Star's special event recycling program targets events that are attended by a large sector of the FNSB population, produce a large amount recyclable waste material in a short period (i.e. on site selling beverages in containers) and lack recycling options on location. Over the past several years, Green Star has provided various levels of recycling services and support for the following events:

- Equinox Marathon
- Go Winter! Expo
- Home Show
- Ice Alaska
- Midnight Sun Festival
- Tanana Valley State Fair
- Tour de Cure Bike Ride
- Golden Wheel's Summer Spectacular

Our services typically include:

- Up to 75 collapsible recycling bin & supply rentals
- Bin & supply delivery, set up, break down & pick up
- Volunteers and/or paid laborers to collect, sort and transport recyclables

We recently surveyed every venue, event planner and event coordinator we could identify in the Fairbanks North Star Borough. The purpose was to determine which services were deemed valuable and whether or not entities would be willing to pay Green Star for our efforts.

A total of nine entities responded, yet only one special event planner expressed a willingness to pay for special event recycling services (Midnight Sun Festival). The following comment is from the Carlson Center, a venue we provide special event recycling services to several times each year (Home Show, Go Winter! Expo, etc.): "Our clients rent out the facility and much of what happens in the facility during the event is determined by them & their needs. Clients willing to pay for a recycling option could certainly do that, but during events that we cannot bill back this option for the event, the Carlson Center is not able to cover the cost."

However, KO Productions is the event planner behind most of the events we provide services for at the Carlson Center. They said, "We love your services, but waste removal is included in our contract with the Carlson Center."

As you can see, neither entity associated with these events is willing or able to underwrite Green Star's time, advertising costs to recruit volunteers or expenses related to supplies. The same holds true for the Tanana Valley State Fair. Green Star provided recycling services at the Fair every year from 2006 to 2014, collecting aluminum cans throughout the fairgrounds and expanding into plastics recycling when that option became available in Fairbanks.

One of the primary reasons Green Star has continually invested our limited resources in expanding the special event recycling program has been to ensure adequate recycling support for large events such as the Midnight Sun Festival and the Tanana Valley State Fair. Reducing the amount of recyclable materials being sent to our community landfill aligns directly with our mission, and Green Star is proud of our accomplishments.

Thanks to the ongoing efforts of Green Star and our dedicated volunteers, we recycled 3,612 pounds of plastic and aluminum during the 2013 & 2014 Fairs. This would have been impossible without the efforts of our Recycling Crew volunteers; 70+ volunteers contributed 305 hours of community service in 2014 alone. The TVSFA typically offers in-kind donations to support the recycling efforts during the Fair such as waiving our non-profit booth fee and providing free day passes for our many recycling

volunteers. However, until 2014 TVSFA also provided a financial contribution in support of our recycling services of at least \$600 since 2010; in 2013 they provided \$775.

In 2014 the TVSFA declined to provide a contribution to support the Fair Recycling program, even though it had continued to grow and gain more support from our community every year. Because that decision was not communicated to Green Star until a few weeks prior to the start of the 2014 Fair, we went ahead with the annual recycling program as planned. However, we were disappointed that the TVSFA decided to discontinue their annual support of Green Star after many years of successful partnership.

In addition to expanding Green Star's capital investments, our operating costs and efforts to support the special events recycling program are substantial. Green Star operates with only one full time employee, an Executive Director, and several part time employees. Due to the length of events such as the Golden Wheel Summer Spectacular and the Tanana Valley State Fair, Green Star has hired at least one temporary, part-time employee every year since 2011. These employees help the Executive Director handle the work and coordination required to manage these extensive special events.

The resources required to recruit, train, and staff volunteers for the duration of 10 day events such as Golden Wheel's Summer Spectacular and the Tanana Valley State Fair is extensive and also requires a significant portion of our Executive Director's time during the month leading up to and during the events themselves.

In 2015, the staff and Board of Directors of the TVSFA communicated that they were still unable to offer any monetary support for this very visible and valuable program. Meanwhile, Golden Wheel was willing to provide a \$5,000 sponsorship for our services during last year's Summer Spectacular.

This year, Golden Wheel can only offer a \$2,000 sponsorship. And while TVSFA's management is willing to have Green Star provide Special Event Recycling services at the fair this year, they are once again unable to commit any financial support to Green Star. However, they will donate a prime booth worth \$835 from which our staff and volunteers will distribute the Fairbanks Recycling Guide and the reusable shopping bags funded by the Recycling Commission. TVSFA will also donate 150 day passes for our volunteers, worth \$1,500.

Green Star's staff and volunteers receive many compliments and expressions of gratitude while they work hard to collect and sort recyclables at community events. Based on feedback we received from the community, we've decided to approach the FNSB Recycling Commission to request funding for our special event recycling program. The conspicuous lack of our long-standing recycling program at last year's Fair was definitely noted by the community.

B. Project team (who will carry out the work)

Executive Director Becca Brado and four part-time staff: Executive Assistant Sarah Marshall, Education and Outreach Specialist Kalee Meurlott, Electronics Resale Coordinator Jacques Mara, and Warehouse Management Materials Specialist Dan Bates. Green Star also has an active Board of Directors and a large volunteer pool (181 volunteers helped out in 2015). We have also hired three part-time, temporary laborers (two teenagers and a retiree) who assist with our special events recycling program as needed.

C. Anticipated audience (if an outreach project)

Green Star is updating the annual Recycling Guide, and printed copies will be distributed to passers-by as a key component of our outreach and education campaign at special events. We expect more than 100,000 people to visit Golden Wheel's Summer Spectacular and the Tanana Valley State Fair this year. We also plan to complete the distribution of the remaining reusable shopping bags.

D. Project timeframe, including any deadlines that must be met

Summer is Green Star’s busiest season for the special event recycling program. On June 19th, Green Star staff and volunteers worked more than 16 hours to provide recycling for the Midnight Sun Festival. We also spent many hours before the event recruiting, scheduling and coordinating volunteers as well as several hours afterwards to transport sorted recyclables, educational information and 75 recycling bins out of downtown.

Our next community event is the Golden Wheel Summer Spectacular at Ice Alaska from July 22nd – July 31st. As mentioned, Golden Wheel was forced to slash their sponsorship this year, so Green Star will incur more expenses than the \$2,000 sponsorship will cover. The next event, which is the Tanana Valley State Fair, is scheduled from August 5th – August 14th. Without a Recycling Commission sponsorship, Green Star will not be able to absorb the expenses related to providing recycling services for ten straight 10-hour days—especially considering how quickly it begins after the ten straight 10-hour days of Golden Wheel’s Summer Spectacular.

E. Consistency with the Borough’s overall recycling plan

Recycling is a strategy for community improvement and development. It has significant economic, environmental and social benefits. Encouraging the public to reduce and recycle waste is an integral component of the FNSB’s Solid Waste Management Plan.

Support from FNSB would increase awareness and support sustainable practices in the Interior by diverting recyclable waste from our landfill. With your help, Green Star can better respond to the ever-increasing demand for recycling within the borough. A direct benefit of this achievement will be the extension of the life of our local landfill, thereby conserving land, water, air and taxpayers’ dollars.

F. How will you demonstrate success: are there measurable goals, and what methods will be used to evaluate them?

Green Star will track the weight of each recyclable material collected at special events throughout the year and provide quarterly reports to the FNSB Recycling Commission. We strongly believe this is an important program that would be a good investment of borough funds.

G. Any additional information, specifications, contracts, etc., that will assist the Recycling Commission in evaluating your proposal.

Following is a quote from ClearStream Recycling regarding transporters that are sorely needed to help our staff and volunteers more easily move 75 unwieldy collapsible recycling bins, lids and bags.



ITEM DESCRIPTION	EACH	QTY	TOTAL
Transporter Only (black): Assembly required.	\$575.00	3	\$1,725.00

Shipping Rates:
[\(change my address\)](#)

FedEx Ground \$928.25 ↕

United States, AK, 99701

Tax: \$0.00
Total: \$2,653.25

Expenses

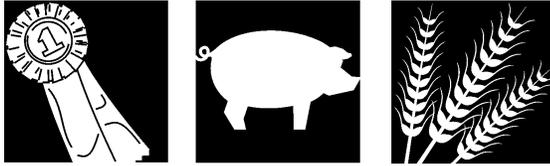
Payroll Expenses: Twenty 10-hour days, plus volunteer recruitment/coordination, bin and recyclable transportation for one full time and four part time employees	\$ 10,819.40
Snacks for volunteers	\$ 278.60
3 bin transporters, shipping & handling	\$ 2,652.00
Volunteer advertising via Facebook and News Miner	\$ 500.00
	\$ 14,250.00

Income

Golden Wheel Summer Spectacular sponsorship	\$ 2,000.00
Corporate Sponsorship	\$ 1,000.00
Proposed FNSB Recycling Commission sponsorship	\$ 11,250.00

In kind Donations

Golden Wheel Summer Spectacular in-kind donation of day passes for up to 75 2-hour shift volunteers and booth for recycling info/bag distribution	\$ 225.00
TVSFA in-kind donation of day passes for up to 150 2-hour volunteer shifts and prime booth at Tanana Valley State Fair for recycling info/bag distribution	\$ 2,335.00
	\$ 2,560.00



Tanana Valley State Fair
A S S O C I A T I O N

June 30, 2016

To Whom It May Concern:

The Tanana Valley State Fair will provide 150 tickets for a total value \$1500.00 and a booth space valued at \$835.00, to Green Star of Interior Alaska for the 2016 Fair provided a recycling grant is received from the Fairbanks North Star Borough. Green Star will provide recycling from August 5 through August 14, 2016 at the Tanana Valley State Fair, located at 1800 College Road.

Without the grant we will not be able to have Green Star do our recyclables. Please consider this request.

Respectfully,

Joyce Whitehorn
General Manager
Tanana Valley State Fair Association
907-451-5560

Alaska Department of Commerce, Community, and Economic Development

Division of Corporations, Business and Professional Licensing

P.O. Box 110806, Juneau, Alaska 99811-0806

This is to certify that

GREEN STAR OF INTERIOR ALASKA

P.O. BOX 82391 FAIRBANKS AK 99708

owned by

GREEN STAR OF INTERIOR ALASKA

is licensed by the department to conduct business for the period

October 13, 2015 through December 31, 2016

for the following line of business:

81 - Services

56 - Administrative, Support, Waste Management and Remediation Services



This license shall not be taken as permission to do business in the state without having complied with the other requirements of the laws of the State or of the United States.

This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.

Chris Hladick

City of Fairbanks
OFFICE OF THE CITY CLERK
800 CUSHMAN STREET
FAIRBANKS, AK 99701-4615

101264
GREEN STAR OF INTERIOR ALASKA
PO BOX 82391
FAIRBANKS, AK 99708



City of Fairbanks
800 CUSHMAN STREET
FAIRBANKS, AK 99701-4615
(907) 459-6715

License/Permit No. 5213

2016 BUSINESS LICENSE

DBA: GREEN STAR OF INTERIOR ALASKA

License Expires: 12/31/2016

101264
GREEN STAR OF INTERIOR ALASKA
PO BOX 82391
FAIRBANKS, AK 99708

Line of Business Code: 81

Line of Business: OTHER SERVICES (EXCEPT PUBLIC ADMINISTRATION)

This license is expressly conditioned upon the holder being in full compliance with all of the applicable ordinances and requirements made under authority of the City of Fairbanks and as such laws and requirements may hereafter be changed or amended. Your license will expire on the above indicated date.

Licenses must be renewed timely to remain compliant and operational within the City of Fairbanks. Licenses/Permits must remain on premises or holder must be able to produce it upon request.

Issue Date: 01/01/2016

J. Janyville Snider
City Clerk

In the event of suspension, revocation, expiration or termination, return this license to the City of Fairbanks at the above address.

THIS LICENSE IS NON TRANSFERABLE
PAGE 26 OF 33

For Office Use: Received: Date: _____ By: _____
--

**APPLICATION FOR SPECIAL RECYCLING PROJECTS
PURSUANT TO FNSBC 8.12.034**

Please fill in all sections of this sheet. All starred items are required before the Recycling Commission will evaluate your proposal. Other relevant documents and your "Plan" should be attached.

1. * **COMPANY/ORGANIZATION NAME:** University of Alaska Fairbanks (UAF), School of Management

2. * **TITLE OF PROPOSAL:** Recycling Kicker Prize for UAF Arctic Innovation Competition

3. * **BRIEF SUMMARY OF PROPOSAL:**

Currently in its eighth year, the Arctic Innovation Competition (AIC) is Alaska's original idea contest hosted by the UAF School of Management (SOM), which currently awards over \$26,000 in cash prizes in three divisions. SOM requests that the Fairbanks North Star Borough Recycling Commission (FNSB-RC) sponsor a new "Recycling Kicker" (additional or side) prize for the AIC Main Division in the amount of \$2,000. The prize would be awarded for the best idea for a product, service, or process that encourages or utilizes the reduction, reuse, and/or recycling of solid wastes.

4. * **NAME(S) AND TITLE OF PRINCIPALS OF COMPANY/ORGANIZATION:**

Name	Title
<u>Dr. Ping Lan</u>	<u>AIC Director & SOM Business Admin Professor</u>
<u>Tammy Tragis-McCook</u>	<u>SOM Director of Development and Outreach</u>

5. * **CONTACT PERSON:**

Name: Tammy Tragis-McCook
Address: 303 Tanana Loop
Fairbanks, AK 99775-6080
Phone: (907) 474-7042
Email: tammy.tragis@alaska.edu

6. * **VALID ALASKA BUSINESS LICENSE:** License #104849 – SEE ATTACHED (Page 6)

Copy attached: Yes No

In addition, a valid City Business License is required if doing business within the City boundaries. Attached: Yes No Not applicable

7. * **PROOF OF FINANCIAL RESOURCES IN PROPORTION TO THE BUSINESS PURPOSE** (additional pages may be attached or expound upon this in your business plan):

SEE ATTACHED – Projected Budget for AIC 2016 (Page 7)

8. * **AUTHORIZED SITE APPROVAL BY DEC AND FNSB, IF APPLICABLE.** NOT APPLICABLE
(attach copies of documentation)

9. * **Submission of a Business Plan to Show (please attach)** SEE ATTACHED (Pages 3-5)
- A. A summary of the proposed project and its anticipated impacts
 - B. Project team (who will carry out the work)
 - C. Anticipated audience (if an outreach project)
 - D. Project timeframe, including any deadlines that must be met
 - E. Consistency with the Borough's overall recycling plan
 - F. How will you demonstrate success: are there measurable goals, and what methods will be used to evaluate them?
 - G. Any additional information, specifications, contracts, etc., that will assist the Recycling Commission in evaluating your proposal. You may include in your Plan expansions or explanations of your answers on sections of this form.

10. * **ARE YOU ASKING FOR BOROUGH FUNDING?** Yes No

If Yes:

A. How much? \$ 2,000

B. For what time period? October, 2016

C. One time or ongoing? Ongoing (Annual)

D. What are estimated monetary needs for trial (first) period? \$ 2,000

E. What are estimated monetary needs for further time-periods? \$ 2,000 annually

(NOTE: Approval of this plan at this level does NOT guarantee Borough funding)

11. * **HOW DO YOU SEE YOUR PROPOSAL AFFECTING THE OVERALL IMPACT ON THE GOAL OF RECYCLING AND REDUCTION OF SOLID WASTE GENERATED IN THE BOROUGH?**

With the inspiration of a special prize for recycling-related ideas, the AIC aspires to encourage the reduction, reuse and recycling of solid wastes generated in the borough through these ideas generated by creative community members. The addition of a special recycling-focused prize at this high-profile, UAF-sponsored event will not only generate innovative new ideas, but will also highlight the importance of recycling. We hope to engage the FNSB community in discussions on improving and expanding recycling efforts in the borough.

Date: June 30, 2016

Print Name: Tammy Tragus-McCook

Signature: 

A. A summary of the proposed project and its anticipated impacts

The UAF School of Management (SOM) proposes a new “Recycling Kicker” prize to be created for the Main Division of its annual UAF Arctic Innovation Competition (AIC).

Currently in its eighth year, AIC is Alaska’s original idea contest created and launched in 2009 by SOM professor of business administration Dr. Ping Lan. AIC is run by SOM and currently awards over \$26,000 in cash prizes in three divisions. The competition does not require a prototype or business plan to enter (although they are recommended), individuals and teams of all ages may enter, and there is no entry fee.

AIC is held annually in the fall. This year, AIC opened for submissions in February and the submission deadline is Friday, September 23, 2016. Although competitors are encouraged to submit their ideas via the online form, a copy of the AIC 2016 Idea Submission form is also available in PDF format (www.arcticinno.com/wp-content/uploads/2015-AIC-Idea-Submission-Form.pdf)

Following the deadline, all ideas submitted to the AIC Main Division undergo a four-step screening process and the top ideas (up to 20) are selected for the final competition. More details about the pre-screening process are available on the AIC website (www.arcticinno.com/competition-details/selection-process).

This year, the final competition will be held on Saturday, October 22, 2016 at the UAF Wood Center. At this event, all top competitors in each division present their ideas to a panel of judges. A list of AIC 2015 judges is available on the AIC website (<http://arcticinno.com/competition-details/competition-judges>). These panel judges make the final selection of winners for all prizes in all divisions, including the “Kicker Prizes.”

AIC currently offers the following prizes for the Main Division, which is open to competitors ages 13 and up (additional prizes in the amount of \$2,150 are awarded in the JR and Cub Divisions):

- 1st Place - \$10,000
- 2nd Place - \$5,000
- 3rd Place - \$2,000
- 4th Place - \$1,000
- Honorable Mentions (up to 16) - \$100
- Fan Favorite - \$100
- Arctic Kicker - \$2,000 for best arctic-related idea
- Student Kicker - \$2,000 for best idea from an Alaska college student

AIC already offers two “Kicker” prizes, which are additional side prizes awarded to a top 20 Main Division competitor who may or may not also win one of the top four prizes. SOM is requesting that the Fairbanks North Star Borough Recycling Commission (FNSB-RC) sponsor a new “Recycling Kicker” prize for the AIC Main Division in the amount of \$2,000. This new prize would be introduced for AIC 2016 and would be available annually.

If this proposal is approved and funded, the definition explaining which idea submissions qualify for the Recycling Kicker would be finalized and agreed to by both SOM and FNSB-RC. However, for discussion purposes, SOM proposes the following description as a guideline:

Recycling Kicker Prize

The AIC Recycling Kicker will be awarded for the best idea for a product, service, or process that encourages or utilizes the reduction, reuse, and/or recycling of solid wastes.

B. Project team (who will carry out the work)

The AIC Team includes:

- Dr. Ping Lan, AIC Director and SOM Professor of Business Administration
- Tammy Tragus-McCook, SOM Director of Development and Outreach
- Andrea Miller, SOM Marketing Specialist

In addition to these year-round SOM faculty and staff members, the AIC event is supported by an advisory committee made up of local business people.

C. Anticipated audience (if an outreach project)

AIC currently accepts submissions from anywhere in the U.S. or Canada. However, due to the requirement that all Top 20 competitors appear in person in Fairbanks for the final competition (which occurs just a few weeks following notification of which ideas have moved on to the finals), most applications come from within Alaska. AIC does advertise as widely as possible within the constraints of our marketing budget, including newspaper, radio, Facebook, and Google ads. We also promote AIC through as many in-person visits and events as possible throughout Fairbanks as well as in Anchorage, with a focus on youth-related activities in order to increase participation in our Cub and JR divisions. Our marketing events for 2016 include the Anchorage Mini Maker Faire, the Chena Hot Springs Renewable Energy Fair, Rural Alaska Honors Institute (RAHI), and Alaska Summer Research Academy (ASRA), as well as local charter schools.

D. Project timeframe, including any deadlines that must be met

July 13, 2016 – AIC proposal reviewed at July meeting of the FNSB Recycling Commission

July, 2016 – AIC receives decision on proposal from FNSB-RC

July/August, 2016 – AIC adds “Recycling Kicker” category to AIC Submission Form and notifies AIC email list and competitors about the new prize category

July/August, 2016 – AIC begins including information about the “Recycling Kicker” prize on the AIC website, flyer, and other promotional materials

September 23, 2016 – AIC 2016 Idea Submission Deadline

October, 2016 (or sooner) – AIC receive funds from FNSB

October 22, 2016 – AIC 2016 Final Competition at UAF Wood Center; AIC awards all prizes

E. Consistency with the Borough’s overall recycling plan

The goal of AIC is to inspire creative ideas that will lead to new inventions and innovative businesses. Since many of our competitors live in Alaska, and especially the FNSB area, it is very likely that some of those new innovations and entrepreneurial endeavors will benefit the FNSB community. With the inspiration of a special prize for recycling-related ideas, the AIC hopes to encourage the reduction, reuse and recycling of solid wastes generated in the borough through these ideas generated by creative community members.

F. How will you demonstrate success: are there measurable goals, and what methods will be used to evaluate them?

The success of the project will be demonstrated by the quantity and quality of ideas that are submitted to compete for the Recycling Kicker prize each year.

The AIC Idea Submission form will include the question: “Is your idea related to the reduction, reuse, or recycling of solid waste?” If competitors answer “Yes,” the idea will be included for consideration for the Recycling Kicker prize. Final decisions about whether or not each idea actually qualifies for the prize will be determined during the pre-screening process and prior to inclusion of the idea in the AIC Top 20 for the final competition. The number of competitors who answer “Yes” to this question will be one measurable indication of the success of the project.

In addition, the number of Top 20 competitors vying for the Recycling Kicker prize each year will be another metric for measuring the project’s success, since only the highest quality ideas are selected to compete for prizes in the final competition.

Finally, the AIC team has begun expanding our efforts to follow up with our top competitors and document how their ideas have developed following the competition. We are working with the UAF Patent Office to document whether competitors are able to secure patents for their ideas (either before or after their participation in AIC) and we are contacting past competitors and inviting them to share their success stories. We will be sure to include our Recycling Kicker winners in these follow-up efforts.

G. Any additional information, specifications, contracts, etc., that will assist the Recycling Commission in evaluating your proposal. You may include in your Plan expansions or explanations of your answers on sections of this form.

Alaska Business License # 104849

Alaska Department of Commerce, Community, and Economic Development

Division of Corporations, Business and Professional Licensing
P.O. Box 110806, Juneau, Alaska 99811-0806

This is to certify that

UNIVERSITY OF ALASKA

CONTROLLERS OFFICE PO BOX 756540 FAIRBANKS AK 99775

owned by

UNIVERSITY OF ALASKA

is licensed by the department to conduct business for the period

December 15, 2014 through December 31, 2016
for the following line of business:

61 - Educational Services



This license shall not be taken as permission to do business in the state without having complied with the other requirements of the laws of the State or of the United States.

This license must be posted in a conspicuous place at the business location. It is not transferable or assignable.

Fred Parady
Commissioner

Projected Budget for AIC 2016

Expenses

Cash Prizes	\$ 28,050.00
Advertising	\$ 11,550.00
Labor	\$ 10,600.00
<i>SOM Student Assistants</i>	
<i>Wood Center Labor on Event Day</i>	
Catering and Food	\$ 3,050.00
Website Maintenance	\$ 2,700.00
Promotional Items	\$ 1,200.00
Printing	\$ 1,100.00
Judges Recognition (30 Judges)	\$ 725.00
Miscellaneous Services and Supplies	\$ 750.00
<u>Travel - Anchorage to advertise AIC</u>	<u>\$ 545.00</u>
Total	\$ 60,270.00

Income

BP	\$ 10,000.00
Northrim Bank	\$ 10,000.00
Kinross Fort Knox	\$ 7,500.00
Robinson & Ward, PC	\$ 5,000.00
Design Alaska	\$ 3,000.00
Fairbanks Economic Development Corporation	\$ 2,500.00
Fairbanks North Star Borough	\$ 2,500.00
FNSB Recycling Commission – <i>Proposed</i>	\$ 2,000.00
PDC Inc. Consulting	\$ 2,000.00
Allstate – Chris Marok	\$ 1,000.00
Doyon Limited	\$ 1,000.00
Fairbanks Memorial Hospital	\$ 1,000.00
Anchorage Economic Development Corporation	\$ 500.00
Great Northwest Inc.	\$ 500.00
Juneau Economic Development Council	\$ 500.00
AIC Fund Balance	\$ 4,640.00
<u>Additional Sponsorships (TBD)</u>	<u>\$ 7,000.00</u>
Total	\$ 60,640.00