June 2, 2008

Karlene Fine
Executive Director
North Dakota Industrial Commission
ATTN: Renewable Energy Development Program
State Capitol – Fourteenth Floor
600 East Boulevard
Bismarck, North Dakota 58505

Dear Ms. Fine:

The American Lung Association of North Dakota (ALA-ND) and the North Dakota Ethanol Producers Association are submitting the enclosed proposal to request \$167,764 in funding from the Renewable Energy Development Program of the North Dakota Industrial Commission (NDIC) for the *Promoting Ethanol Fuels in North Dakota* project. The project has a total budget of \$335,527. The project will implement a strong education and promotion campaign to significantly build North Dakotans consumer awareness of the economic and environmental benefits of ethanol fuels and move consumers to significantly increase their use of ethanol fuels.

This letter sets forth a binding commitment on behalf of the American Lung Association of North Dakota and the North Dakota Ethanol Producers Association to complete the project as described in the application if the Commission makes the grant requested.

Promoting Ethanol Fuels in North Dakota

Applicant: American Lung Association of North Dakota on behalf of

the North Dakota Clean Air Choice Team

Project Coordinator/Contact: Valerie Kummer

ALAND Coordinator

212 N 2nd St, Bismarck ND 58501 Phone 701.223.5613 Fax 701.223.5727

Email: vkummer@lungnd.org Website: www.CleanAirChoice.org

Principal Investigator/Project Director: Kelly Marczak, Director

Clean Fuel and Vehicle Technologies program, American Lung Assoc. of the Upper Midwest

Submission date: June 2, 2008

Table of contents

Project Abstract Page Three

Project Description Pages Four to Eight

Need Page Four

Anticipated results/objectives Page Five

Methods and activity description Page Six to Eight

Standards of success Page Eight to Nine

ALA-ND/ALAUM Background and qualifications Page Ten to Thirteen

Management Page Thirteen to Fourteen

Timetable Page Fourteen

Budget Page Fourteen

Tax liability affidavit Page Fifteen

Statement on confidential information

and patents and rights to technical data

Page Fifteen

Final Report: 2008 Benchmark Position Study Appendix A

Project Abstract

The American Lung Association of North Dakota (ALA-ND) is the lead applicant for the proposed one-year *Promoting Ethanol Fuel in North Dakota* project. The total project budget is \$335,527. Key partners include the North Dakota Ethanol Producers Association and the American Lung Association of North Dakota.

The U.S. Energy Independence & Security Act of 2007 will drive both the North Dakota and national markets toward a significant and growing use of ethanol fuels. This federal law, along with growing consumer demand for renewable fuels, offers a strong opportunity to increase the interest in, demand for, and use of ethanol fuels by North Dakota drivers. Currently, the use of ethanol fuels is still relatively low in North Dakota and there is significant opportunity to expand the number of drivers using ethanol fuels and the number of gallons used per-capita. This can potentially lead to increased ethanol production in the state, new jobs, and an expanded retail market for North Dakota's corn crop and other non-food feedstock that can be used to produce ethanol.

The project will implement a tried and proven model of coordinated and strategically selected ethanol fuel promotions and education activities at public events, using both earned (media relations) and paid (advertising) media impressions. If these efforts succeed as they have in neighboring states, they will bring important economic benefits to North Dakota in the form of: (1) significantly increased income from in-state ethanol production, (2) increased retail ethanol fuel sales, (3) job development in the ethanol and related support industries, and (4) increased demand for North Dakota's agricultural products. The project will: significantly increase the percentage of North Dakotans who are aware of the economic, resource renewal, and environmental benefits of ethanol fuels; increase availability of ethanol fuels by establishing 10 new service stations with E85 ethanol statewide, and; significantly increase the use and sales of ethanol fuels at the pump.

5. Project Description

A. Need for the Project. Key government agencies and policy makers, the ethanol industry, and energy and environmental groups recognize that ethanol fuel is a renewable North Dakota resource with potential to provide our state with substantial economic and environmental benefits.

The U.S. Energy Independence & Security Act of 2007, with its new Renewable Fuel Standards (RFS), will require 100 percent penetration of ethanol-blended gasoline (known as E10) in North Dakota and all U.S. markets. Furthermore, a significant increase in use of E85 ethanol (a fuel consisting of up to 85 percent ethanol and 15 percent gasoline), designed for use in flexible fuel vehicles (FFVs), and other mid-range blends (E20, E30, etc) may also play a role in achieving RFS requirements in North Dakota and in other states.

There is major untapped potential and a need to market ethanol fuels close to home for North Dakota consumers. Increasing the use and demand for E85 ethanol and gasoline blended with ethanol will be a boon for our rural state and its agriculture-based economy. North Dakota farmers grow enough corn to produce 736 million gallons of ethanol per year. According to the North Dakota Department of Agriculture, based on current capacity and 2007 production levels, the state uses 17 percent of its corn crop for ethanol production. Based on future and planned capacity and 2007 production levels, North Dakota has the potential to convert more than 60 percent of its corn crop into ethanol. Virtually all North Dakota vehicles with gasoline engines can now safely and efficiently use E10 gasoline, with no significant loss in mileage or reduced performance. In fact, adding the 10 percent ethanol to gasoline eliminated the need for gasoline anti-freeze, an important marketing point during the winter months. The market for ethanol fuels has good potential for expansion. When surveyed, only 35.3% of North Dakotan drivers said they usually or always use ethanol fuel in their vehicles.

There are an estimated 29,000 flexible fuel vehicles (FFVs) on North Dakota roads right now that can use E85; however, the number of FFV owners who purchase E85 ethanol on a regular basis is relatively low and can be increased significantly. When surveyed, 8.9% of North Dakotan FFV owners said they usually used E85 ethanol fuel. This is due, in part, to a combination of factors, including lack of fuel availability, a lack of understanding of the benefits of ethanol fuels, and misinformation about ethanol fuels. The purpose of this proposal is to address and close the significant gap in consumer understanding and acceptance of ethanol fuels, and to provide a statewide program of intensive education and promotional activities that will drive this large untapped market of motorists toward increased ethanol use.

B. Anticipated results/outcome objectives. The expected benefits of the one-year project for North Dakota are reflected in the outcome objectives. Outcome objective one: to significantly increase the percentage of North Dakotans who are aware of the benefits and availability of ethanol fuels with preand post- surveys showing a 25 percent increase in stated awareness, with continued increases in consumer awareness in the following years; Outcome objective two: to demonstrate a change in market behavior with a 19% increase in overall ethanol sales from 46 percent (annual market penetration for 2007) to 65 percent of the market. This represents an increase of 67,934,378 or more gallons at the pump, with an anticipated increase of 29 percent to 75 percent of North Dakotans using ethanol fuels, or 103,907,943 or more gallons, within two years of the project start date; Outcome objective three: to triple sales of E85 ethanol by the end of year one of the project, through increased repetition of those already using E85, by building the number of new users of E85, and by increasing the current 8.9 percent E85 usage rate by North Dakota FFV owners to 20 percent with a continuing increase in the following years, and; Outcome objective four: to increase the availability of ethanol fuels in North Dakota by establishing 10 or more new service stations with E85 ethanol statewide.

C. Methods and Activity Description.

ALA-ND and the North Dakota Ethanol Producers Association (NDEPA), with the assistance of KranzlerKingsley Marketing, will use the results of the pre-campaign scientific survey (Appendix A) to develop a set of consistent and effective ethanol fuel education and promotional campaign messages. ALA-ND and NDEPA recently received a grant of approximately \$10,000 from the North Dakota Department of Commerce to carry out this survey. The information gathered by the survey will be instrumental in forming the core messages of the promotional and advertising campaign. The survey will determine what is most important in promoting E85 and E10 use; how to address the unique needs and concerns of North Dakotans, and; whether respondents are aware of the specific economic, environmental, and close-to-home energy security benefits of ethanol fuels.

ALA-ND and its partners will coordinate and implement <u>an intensive</u>, <u>statewide ethanol fuel</u> <u>promotion and education campaign</u> using an estimated 5 million earned media impressions and an estimated 30.3 million paid media impressions, together with educational and promotional events. The focus will be on significantly increasing consumer awareness, understanding, and acceptance of the economic, resource renewal, and environmental benefits for North Dakota and North Dakotans using ethanol fuels.

The completed pre-campaign survey will be used to formulate a final marketing plan, as well as the creative approaches and themes/core messages. The first likely message is that ethanol production and use is good for the state's economy as a home grown, sustainable, renewable resource that contributes to the economy and creates jobs and income for North Dakotans. A second likely theme is that North Dakota can be proud of its multiple energy resources and ethanol is one of these important tools to be developed and used. In addition, a key theme will be that E85 ethanol is good for the environment and human health, including messages to directly counter the negative publicity E85 ethanol has received. The approach will balance messages about and encourage appropriate use of both E85 ethanol and E10 fuels.

The Project Coordinator and Communication Director for the American Lung Association of the Upper Midwest (ALAUM) will carry out regular earned media activities to consistently build public awareness, acceptance, and motivate consumers to use ethanol fuels. The estimate of 5 million earned media impressions is based on accepted media industry tracking methods and ALAUM's past track record of working with local reporters and editors.

Proactive earned media coverage will involve: inviting television, radio, and print media to cover station promotions and other community events; regular letter writing to newspaper editors, and; holding press conferences. Reactive earned media coverage will take the form of actively responding to and providing facts and arguments to counter negative publicity and attacks on ethanol fuel.

The Project Coordinator will coordinate and implement paid broadcast advertising that will provide North Dakotans with consistent messages about the importance and benefits of ethanol fuels. These paid media advertisements will reach the major media markets and most of the state to combine for an estimated 30.3 million impressions during the one-year period. The advertising and marketing firm of KranzlerKingsley and the project partners will take an active role in crafting core messages and providing input on specific ads.

With an anticipated grant from the U.S. Department of Energy and North Dakota Department of Commerce, ALA-ND will carry out <u>station building activities</u> that will result in 10 new stations carrying E85 ethanol fuel in strategic locations of the state. Increasing the availability of ethanol fuels at the pump is a critical part of promoting consumer use. The equipment component of this activity will be implemented with funding from other sources, and is therefore not reflected in the budget included with this proposal.

The Project Coordinator will organize and implement an extensive E85 ethanol promotion and education campaign to increase the awareness and use of this fuel by FFV owners and increase overall public awareness and acceptance. The Project Coordinator will organize and implement E85 ethanol promotional campaign events through 20 or more public and service station events. These events will

be well advertised through mailings to owners of FFVs in the area of the station and will typically offer E85 ethanol at a sharply reduced price for a few hours during the station promotion event. The station promotion events will draw the attention and interest of FFV owners, build awareness of a station carrying E85 ethanol near their homes, and provide education that will increase their motivation to consistently use E85 ethanol fuels. The Project Coordinator will provide one-on-one education to FFV owners and other members of the public. Earned media coverage of these events will greatly amplify the message about E85 ethanol fuels to the public.

Station events have had considerable success in the past with sales for E85 ethanol on that day typically increasing ten-fold from normal daily sales. The event illustrates to all involved the significant potential in E85 ethanol sales. The station events inevitably result in building awareness of many FFV owners that did not know that E85 ethanol fuel was available in their area and/or were not aware of the safety, cost competitiveness, or other economic and environmental advantages of the fuel.

The Project Coordinator will carry out <u>extensive ethanol promotion and education activities</u> that will reach 50,000 or more North Dakotans with visual education displays, printed materials, and one-to-one education through a highly visible presence at 12 or more trade shows and events. These events will include agriculture and energy, and automotive industry trade shows, county fairs and the state fair.

6. Standards of success. The project's promotional and education efforts are designed to bring important economic benefits to North Dakota in the form of: (1) significantly increased income from ethanol production, (2) increased ethanol sales at the pump, (3) job development in the ethanol industry and related support industries, and (4) increased demand for agricultural products.

ALA-ND sees the project as a platform to build toward further intensified efforts to promote consumer use of ethanol fuels. One targeted future effort will be to expand paid advertising to a higher level through partnerships with industry groups.

Based on the American Lung Association's experience promoting renewable fuels in other states, the number of FFV drivers that use E85 ethanol on a regular basis can be significantly increased through education and awareness building activities conducted by local champion-based coalitions. Promoting awareness and use of existing ethanol fuels will prepare North Dakotans for using both current and future blends. The proposed campaign has strong potential to lead to significantly greater ethanol sales as new ethanol blends become available. Some advocates believe mid-level ethanol fuel blends in the range of 15 to 50 percent ethanol may be available for use in more vehicles in the near future. There is also good potential for the promotional campaign to motivate a growing number of North Dakotans to purchase FFVs because of their economic and environmental benefits. U.S automakers have committed that by the year 2012, 50 percent their production models will be flexible fuel vehicles.

With public awareness strongly focused on rising gasoline prices, this is an ideal time to build public awareness and acceptance of the use of renewable-based ethanol fuels. The survey research indicated that women between the ages of 18 to 49 had the lowest awareness level regarding ethanol fuels and the lowest propensity to have a rigid opinion. This provides an opportunity to help create positive opinions and lifelong buying habits. This group, in general, is more eco-friendly and biofuels are of interest to them. In addition, ethanol use and production should not be viewed as a competitor to North Dakota's oil industry, but rather a complement with important long-term and sustainable benefits.

Increasing the use of E85 ethanol fuels will bring important environmental benefits to North Dakota. Research shows that the use of E85 ethanol in FFVs: 1) reduces ozone-forming tailpipe pollution by up to 20 percent, 2) prevents up to four tons of fuel lifecycle greenhouse gas emissions per FFV every year (when fueled exclusively with E85), 3) decreases overall lifecycle greenhouse emissions by up to 30 percent, and 4) cuts the toxic gasoline compounds that would otherwise be introduced into our environment by as much as 80 percent.

7. ALA-ND and ALAUM background and qualifications

The American Lung Association of North Dakota (ALA-ND) is the lead applicant for this proposal and will manage the overall project. The key partners involved are ALA-ND and the North Dakota Ethanol Producers Association.

During the past three years, ALA-ND has carried out key education and marketing activities to promote the use of E85 ethanol fuel in the state with the strong support of the Clean Air Choice Program of the American Lung Association of the Upper Midwest (ALAUM). The Clean Air Choice Program is recognized both regionally and nationally as a leader in promoting renewable fuels. With more than 10 years of hands-on experience, team-building and an exceptional track record of advancing both consumer awareness and E85 ethanol sales and availability in Minnesota, Wisconsin, Illinois and Iowa, the Clean Air Choice Team is uniquely positioned to adapt proven models of success for the unique challenges and opportunities North Dakota offers.

In 2006, ALA-ND merged with five other states to form the American Lung Association of the Upper Midwest (ALAUM). The merger occurred as part of a national American Lung Association effort to bring about regionalization in order to increase efficiency and cooperation in service delivery. As part of the ALAUM, ALA-ND has developed a very close and positive working relationship with the Clean Fuels Program that has led to key accomplishments throughout the upper Midwest.

With active support of ALAUM's Clean Air Choice Program, ALA-ND has significantly increased the number of fueling stations in North Dakota that sell E85 ethanol fuel by supporting the development of 20 new or expanded E85 ethanol fueling stations. This activity has been carried out with funding from and in partnership with the North Dakota Department of Commerce, National Ethanol Vehicle Coalition, and the U.S. Department of Energy. ALA-ND's efforts have helped to increase the number of North Dakota's fueling stations that sell E85 ethanol from 3 to 26.

ALA-ND has carried out station events that are crucial to increasing access to and use of E85 ethanol in North Dakota. ALA-ND has gained earned media coverage of these station events to

enhance public awareness of E85 ethanol. During the past two years, ALA-ND has coordinated and carried out a number of additional earned and paid media activities. This includes purchasing television and radio advertising in Jamestown, ND and in western North Dakota. Since January 2007, ALA-ND has sponsored displays and provided educational brochures and one-to-one education to build awareness and acceptance of E85 ethanol fuels at more than 15 trade shows, fairs, and events, including the Energy Generation Conference in Bismarck, the CornVention in Fargo, and the KMOT Winter Ag Expo in Minot.

ALAUM's Clean Air Choice Program. ALAUM's Clean Air Choice program has been honored by the U.S. Department of Energy and by the leaders of neighboring states whose biofuels programs have been greatly aided by the program's efforts, especially in Minnesota, Wisconsin and Iowa. ALAUM's leadership and work with many coalition partners has had a dramatic impact in these states by (a) building consumer awareness and acceptance of the benefits of E85 ethanol and E10 fuels, b) driving consumer choice toward a significant increase in the use of E85 ethanol fuels, and c) ALAUM's strong partnership with the General Motors Corporation has been instrumental in the growth of E85 ethanol promotional and educational efforts across the region.

Drawing on the highly successful model developed first in Minnesota, and modified to work in other states, ALAUM program leaders train staff in seven states, guiding their activities and media relations, and assisting in production of consumer materials and local partnership development. The successes in Minnesota, Wisconsin and Iowa provide strong examples of the impact that the Clean Air Choice Team's promotion and education efforts have had on awareness, acceptance, and use of E85 ethanol fuel. In Minnesota, surveys indicate that the percentage of consumer awareness and recognition of E85 ethanol as an alternative fuel and understanding of the important environmental benefits of E85 ethanol fuel grew from single digit levels at the outset in 2000 to 85 percent familiarity in June 2007. Use of E85 ethanol fuel has increased tremendously in Minnesota and Iowa as a result of coordinated station building and promotional activities. In Iowa, since the introduction of the

American Lung Association's Clean Air Choice program, the state has more than tripled its E85 gallons.

In 2007, ALAUM's media tracking tallied more than 100 million TV, radio, and print earned media impressions directly attributable to the program's work in the six-state region to highlight the clean air and economic benefits of alternative fuels. In 2007, ALAUM estimates that its paid billboards, direct mail, print, radio, television and special event-related advertising generated 45 million media impressions. While the vast majority of the media coverage generated is positive, ALA-UM and ALA-ND vigorously defend ethanol-based E85 ethanol when the alternative fuel is wrongly reported or editorialized as "bad for the environment".

Since the start of the E85 ethanol national pilot market program in 1998, ALAUM has been instrumental in providing technical assistance and support to introduce E85 ethanol fuel in 600 of the 1,550 stations that now carry the fuel across the country. In 2007, ALA-UM personnel conducted more than 190 special events promoting ethanol through education at fairs, trade shows, and other venues in the upper Midwest region.

ALAUM has gained strong national and growing international recognition for its ethanol and biodiesel fuel expertise. For example, the US Department of Energy contracted with ALA-UM staff to author its E85 Fleet Toolkit website. ALA-UM receives regular requests for consultation, technical assistance, and guidance from states across the county as well as recent requests from Canada, Thailand and Australia.

Project staffing. Kelly Marczak, Director of Clean Fuel and Vehicle Technologies with ALAUM, will serve as the <u>Project Director/Principal Investigator</u> for the proposed project. Ms. Marczak has nine years experience in alternative fuels and vehicle technologies, and has extensive experience in program and staff management and successful administration of major government and private grants. She provides oversight of E85 ethanol- and biodiesel market development in the states of North Dakota, South Dakota, Iowa and Minnesota.

Valerie Kummer will serve as <u>Project Coordinator</u>. Ms. Kummer has served as the Coordinator for the North Dakota Office of the American Lung Association of the Upper Midwest for one year. In this role, she has been instrumental in successfully coordinating and implementing the Clean Air Choice Program including station promotion events, new E85 ethanol station development, and education and promotion at trade shows, fairs, and other locations. Ms. Kummer has coordinated and implemented earned media coverage for E85 ethanol in conjunction with station and other events. Ms. Kummer has additional experience in planning, organizing, and delivering events and programs and has a Bachelor of Arts Degree in Political Science from the University of Arizona. Ms. Kummer also recently took on the role as the Red River Valley Clean Cities Coalition Coordinator for the U.S. Department of Energy Clean Cities program.

Additional community partners. The North Dakota Ethanol Producers Association, the North Dakota Corn Growers Association, the North Dakota Department of Commerce, the North Dakota Department of Agriculture, General Motors Corporation, the National Ethanol Vehicle Coalition, the Ethanol Promotion and Information Council and the U.S. Department of Energy Clean Cities are important project partners. These partners bring strong knowledge of ethanol production, the ethanol market in North Dakota, and consumer needs. They will provide important input into development and design of the promotional campaign messages. They will also provide support for station events and implementing earned media activities.

8. Management. ALA-ND, ALAUM, and the Project Director have extensive successful experience managing and reporting on corporate, foundation, and government grants, including major grants for ethanol fuel projects. With the proposed activities and outcome objectives serving as project deliverables, the Project Director will oversee and report on accomplishments of all project activities. The Project Coordinator will manage and maintain thorough records of the day to day activities and monitor project progress on all deliverables. The Project Director will hold weekly supervisory meetings with the Project Coordinator to monitor and assure progress on the grant. ALAUM's

accounting department will maintain careful financial oversight of all expenditures on the grant in keeping with standards in the field. The Project Director and Project Coordinator will provide program, outcomes, and financial reports to the ND Industrial Commission as required.

9. Timetable. Upon receipt of the grant, the Project Coordinator will oversee development of the core promotional messages to be completed in two months time. Beginning in month three, the E85 ethanol station events, earned media activities, and educational events will be scheduled on a regular basis throughout the one-year period as well as provided in response to opportunities that arise for events and media activity. Broadcast advertising will be carried out on a regular basis. The key evaluation points are a post-campaign survey to be completed at the end of the one-year period and monitoring ethanol fuel usage on a quarterly basis and at project completion.

10.

	Estimated	Budget - No	rth Dakota Clean Air Choice Work	
			(USDOE, NDCorn, NDEPA, GM)	Request of
Itemized		(\$)	ALAND and Partner Match	NDIC
	ALA-ND Staff (Portion of 1 FTE; 1 intern)	21,300	10,650	10,65
	Benefits (31%)	6,603	3,302	3,30
	Personnel Total	27,903	13,952	13,95
	Telephone/Long Distance	874	437	43
	Exhibiting Expenses	1,200	600	60
	ND Clean Air Choice Display	950	475	47
Local Mileage/Station Visits		1,100	550	55
Shipping/Postage - Events		3,500	1,750	1,75
	Broadcast TV Buy	140,000	70,000	70,00
	Radio Buy	60,000	30,000	30,00
Misc Printing/Published Materials/POP Advertising		10,000	5,000	5,00
	Outdoor/Billboards	60,000	30,000	30,00
	Earned Media Expenses	5,000	2,500	2,50
	Web	5,000	2,500	2,50
	Production	20,000	10,000	10,00
	Total Request	\$ 335,527	\$ 167,764	\$ 167,76

This grant request is for approximately 50% of the project costs totaling \$434,730. This grant is necessary as it will make up half of the projects cost allowing us to move forward with the critical consumer education work.

11. Tax liability affidavit. This affidavit affirms that the American Lung Association- North Dakota					
does not have an outstanding tax liability owed to the State of North Dakota or any of its political					
subdivisions.					
Valerie Kummer, ALA-ND Coordinator					
12. and 13. Statement on confidential information and Patents and Rights to Technical Data.					
The ALA does not consider any of the information to be provided in this grant application to be of a					
confidential nature or to require protection. The ALA also does not claim patents or rights to technical					