

**ALASKA STATE LEGISLATURE**  
**HOUSE COMMUNITY AND REGIONAL AFFAIRS STANDING COMMITTEE**

March 5, 2002

9:08 a.m.

**COMMITTEE CALENDAR**

OVERVIEW: ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION LOW-SULFUR DIESEL SULFUR FUEL REQUIREMENTS.

**TAPES**

02-14, SIDES A & B

**CALL TO ORDER**

Representative Carl Morgan Co-Chair, reconvened the House Community and Regional Affairs Standing Committee to order at approximately 9:08 a.m. [Minutes pertaining to the legislation heard this day can be found in the 8:10 a.m. minutes for the same date.]

**PRESENT**

Committee members present were Representatives Morgan, Meyer, Murkowski, Guess, and Kerttula.

**SUMMARY OF INFORMATION**

DAVID ROGERS, Deputy Director, Division of Air and Water Quality, Department Environmental Conservation; and RON KING, Program Manager of the Air and Nonpoint and Mobile Sources at Department Environmental Conservation (DEC) presented the committee with information on the December 2000 Federal Environmental Protection Agency (EPA) rule to reduce emissions of particulate matter (PM) and Nitrogen Oxide (NOx) from year 2000 and newer large trucks and buses.

MR. ROGERS referred to his handout entitled, "Alaska Ultra-Low Sulfur Diesel Fuel Transition Plan", to describe the types of vehicles covered [and not covered] by the rule. [A copy of the handout and presentation are included in the committee packet.]

MR. ROGERS explained that to meet the EPA ruling, manufacturers would have to install after-treatment devices. These devices require the use of "ultra-low sulfur diesel fuel" having a sulfur content of 15 parts per million (ppm). That is a

considerable lower sulfur content than fuel currently being used in Alaska. Non-use of the low sulfur fuel will result in engine and warranty problems. Alaska may be exposed to federal penalties.

MR. ROGERS explained further that it is a health issue and there will be a 90 percent reduction in PM and NOx with the new equipment in the vehicles. He briefly explained the adverse health and environmental effects from PM and NOx.

MR. ROGERS said ultra-low sulfur diesel fuel will be in our communities in the fall of 2006. Fuel will cost more but how much more is unknown. The EPA has looked at this in the Lower 48 and it looks like the cost will be five cents or more a gallon. Mr. Rogers stated the cost to Alaskans will be higher, and the cost to rural Alaskans will be even more.

MR. ROGERS indicated fuel might have to be imported to Alaska because it's a new kind of diesel fuel and it's very expensive to build facilities necessary to produce this fuel in Alaska. It may be hard to find the fuel for Arctic purposes and in fact he didn't think this Arctic grade fuel is being produced today. Refining of this fuel requires a new process. He described other impacts of using the fuel including separate tank systems for different fuel grades [because the different grades of fuel can't be mixed]; and energy efficiency loss. The fuel can be used in older vehicles not requiring ultra-low sulfur fuel to operate.

MR. ROGERS says the good news is that the EPA recognizes Alaska is different and the state has the ability to develop a transition plan specific to Alaska. He cited the National Plan, or generic plan, and cited that Alaska is the only state that has the opportunity to propose an alternative subject to EPA review. Mr. Rogers went on to cover the variety of plans and their timelines, which is listed in the handout.

MR. ROGERS covered the status of DEC workshops held between April and July in Anchorage; the actions necessary by April 1, 2002; and, future ultra-low sulfur fuel initiatives on the horizon, which are also covered in the handout.

MR. ROGERS said DEC is doing its best; it's complicated and DEC is trying to listen to everyone before the deadline. He said DEC expects to make a cut soon. He noted the upcoming April 1<sup>st</sup> deadline.

A question from Representative Scalzi led to discussion on the use of the new fuel in new trucks. He also discussed the use of new fuel in old trucks. Mr. King discussed some mechanical issues dealing with use of the new fuel in old engines and noted that in order to achieve the full benefit of emission reductions of the new fuel in old engines it will require a catalytic converter and particle trap.

MR. KING noted that aircraft are not subject to the new rules. Aircraft emissions are controlled by the Federal Aviation Administration.

REPRESENTATIVE SCALZI and MR. KING discussed requirements for aircraft, backhoes, fishing boats, et cetera. They further discussed on-road, off-road, and marine uses.

REPRESENTATIVE MURKOWSKI expressed her concerns with trains and air quality issues in Anchorage. She also inquired about fuel refining issues.

BILL BOYCOTT, Director of Refining, Williams Alaska, North Pole, gave an overview of Williams and Petrostar's refineries. He noted that his experience is in the Lower 48 and Canada where he has gone through the low sulfur fuel conversions. Alaska is a unique situation and is currently operating under an exemption from the low sulfur diesel requirements. He stated two upcoming dates will require major investments. The "National Plan" will result in road diesel at 15 ppm sulfur by June 1, 2006. The next date is January 1, 2007 when 30 ppm is required for gasoline sulfur content. He said the "National Plan" is geared toward the Lower 48 where road diesel is a large component of refineries product slate. In Alaska he estimated there is about 100,000 barrels of fuel demand and about 30,000 barrels are diesel. Of that 30,000 barrels, only about 5,000 is road diesel and would fall under the EPA rule. He pointed out that road diesel is a very minor product for the industry in Alaska, and jet fuel drives the refining industry in Alaska. If this situation was in the Lower 48, the refiners would be looking at modifications to equipment currently producing 500 ppm diesel. Mr. Boycott said the refiners in Alaska are looking at grassroots construction costs. The investment cost for the North Pole refinery alone is estimated to be in excess of \$100 million in order to produce this product. It is not economic and would not be responsible to shareholders to make this investment. Therefore, the product will have to be imported, which may lead to cost increases of 20 to 40 cents per gallon. Importation is the direction Williams is heading. Mr. Boycott

said he is looking at lower cost options but has not found anything that will work. He discussed other environmental factors that will influence their decisions.

REPRESENTATIVE MURKOWSKI and MR. BOYCOTT discussed Alaska exporting crude oil while importing refined product.

REPRESENTATIVE SCALZI and MR. BOYCOTT engaged in conversation about Arctic grade diesel product.

MARK SMITH, Yukon Fuel Company, Anchorage, spoke about tankage and shipping products to rural Alaska. Adding a super low sulfur diesel is going to add a 20 percent added complexity, starting at the refinery where the fuel is loaded to the village level where it is used. Speaking on behalf of his customers it would be unusual to find infrastructure [in rural villages] that would easily be able to handle another discrete product. Mr. Smith stated he does not have good cost estimates for what he thinks this would be, but looking at the increase in complexity by 20 percent, the cost of fuel would increase about 20 percent on an infrastructure basis. On behalf of his customers and supply chain, he would like to see a blended transition.

MEERA KOHLER, Chief Executive Officer of Alaska Village Electric Cooperative (AVEC), gave an overview of her organization's operations. Last year AVEC paid about \$1.37 per gallon for diesel. Their retail cost of electricity is about 40 cents per kilowatt-hour. Twenty-eight percent of the cost of electricity is fuel. She related her expectation of an increase of around 25 cents per gallon in rural villages, which translates to two cents a kilowatt-hour, or \$1.25 million on an annual basis. Ms. Kohler said if the fuel efficiency is reduced further by 14 to 15 percent, the number will almost double. Ms. Kohler related operational problems with AVEC's equipment that would be attributed to the new fuel, and the storage tanks used to store diesel will have to be completely cleaned if they will be used to store the new diesel fuel. Ms. Kohler stated her belief that Alaska's current exemption for sulfur content has not exposed Alaskans to adverse health impacts, and cited differences between the Lower 48 and Alaska. She stated it is unreasonable to impose expensive requirements on our state at this time. Ms. Kohler recommended Alaska seek exemption from any mandated changes to the sulfur content of diesel fuel whether used on or off road until at least 2007. After that a phased approach can be used. She asked that Alaska be allowed to continue to use its continued exemption of 500 ppm fuel. Ms. Kohler asked the

legislature to adopt a resolution or a bill requesting DEC and EPA to obtain the maximum flexibility possibility for Alaska.

FRANK DILLION, Executive Vice-President, Alaska Trucking Association; Chair, Citizen's Air Quality Advisory Board, noted that he also sits on the Technical Committee of the Anchorage Metropolitan Area Transportation Study (AMATS). Going to ultra-low 15 ppm sulfur content does not solve the problem with sulfur or diesel particulate in the air in Alaska, either in urban regions or rural Alaska. The circumstances in the Lower 48, highly concentrated and dense population areas with more diesel sources [trucks], result in problems with sulfur. This new fuel helps that and possibly provides some health benefits. He said actual carcinogenic danger and health danger of diesel remains to be scientifically proven and the results are open to debate. Ultra-low sulfur fuel will be used in Alaska in trucks and the cost is going to increase by about 25 to 40 cents per gallon. Also, when there are lower BTUs in the fuel there is reduced performance meaning less freight is hauled at a higher expense. Mr. Dillon said the trucking industry won't pay for these costs; Alaska citizens whether they are urban or rural will pay. Mr. Dillon complemented both DEC and EPA for working with the trucking industry over the past nine years to try to come up with a palatable way to solve the problem. He expressed his thanks to the committee for getting a better understanding of the difficulties facing refiners, distributors, truckers and ultimately Alaskans.

REPRESENTATIVE MURKOWSKI and MR. DILLION discussed potential problems with diesel truck engines and their manufacturers.

RANDY ROMANESKO, City Manager, City of Nome, expressed concerns of the city, Nome's citizens, and citizens of the Bering Sea region. He spoke to financial impacts on consumers in virtually every aspect of community life in Nome. Fuel is now \$2.30 gallon and the price will increase by 20 percent. New infrastructure will be necessary such as new fuel lines and headers, and installation of appropriate tankage. Mr. Romanesko thanked DEC for coming to Nome and conducting public meetings, but noted his concerns about the plan from a market standpoint. One is limited demand with very few vehicles using the fuel in the area; the other is pushing a federal problem to a local area without any money to support it and when there is no local problem. Mr. Romanesko said he would like to see the committee adopt a resolution with provisions requiring DEC to request that the EPA reevaluate and address the ramifications and costs to rural Alaska consumers and to try to maintain maximum

flexibility to allow operations to continue in an economical fashion.

MR. VERN RAUSCHER, General Manager, Tlingit-Haida Rural Electric Association, stated his association serves Kake, Angoon, Hoonah, and the Chilkat Valley. He spoke to the high cost of power and fuel consumption. Because the power is diesel generated, it is some of the costly power in Southeast Alaska at about 33 cents per kilowatt-hour. The association purchases approximately 750,000 gallons per year. Low-sulfur fuel is estimated to increase the cost per gallon by about 20 to 25 cents. He mentioned the other conversion costs and that other redundant tank farm upgrades would all be borne by the customers and would most likely mean a rate increase to the already high cost of power. Mr. Rauscher stated there is not an air quality problem, and the minute benefits of low sulfur fuel aren't worth the additional costs to the consumer and possibly the Power Cost Equalization program. Mr. Rauscher requested that consideration be given to all the consequences of future mandated sulfur reduction in Alaska, especially the cost to the customer.

REPRESENTATIVE MURKOWSKI asked Mr. King for a clarification as to whether the low sulfur rule is going to apply to moving sources and whether stationary generators are subject to the low sulfur requirements rule.

MR. KING replied that the fuel is the problem. The fuel comes in one bulk load and is then distributed to various sources: power, home heating, and mobile sources. The rule itself excludes power generation but the logistics of the way the fuel is distributed means totally separate tanks, total separation of everything, and that's adds a significant cost. Generators would get picked up as a consequence of having to shift to ultra-low sulfur diesel.

CO-CHAIR MORGAN stated that Mr. Mahon's written comments were submitted and available to the committee.

AL EWING, Denali Commission, stated the commission had no testimony but was taking notes and was available for questions.

JOHN HANDELMAN, General Manager, City of Nome Utilities, spoke to the utilities concerns and reiterated that eventually low sulfur fuel only will be available and it will not be possible for barges to bring multiple quantities of fuel. He explained the increased costs the City of Nome Utility would incur. Power costs will be increased by 33 percent in Nome due to the new

fuel. Nome cannot absorb these costs. He further explained the logistical problems that Nome will face. He said he would submit written comments.

#### **ANNOUNCEMENTS**

There were no announcements.

#### **ADJOURNMENT**

There being no further business before the committee, the House Community and Regional Affairs Committee was adjourned at approximately 10:05 a.m.

NOTE: The meeting was recorded and handwritten log notes were taken. A copy of the tape(s) and log notes may be obtained by contacting the House Records Office at State Capitol, Room 3, Juneau, Alaska 99801 (mailing address), (907) 465-2214, and after adjournment of the second session of the Twenty-Second Alaska State Legislature this information may be obtained by contacting the Legislative Reference Library at (907) 465-3808.