

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

February 17, 2009

8:01 a.m.

**MEMBERS PRESENT**

Representative Bob Herron, Co-Chair  
Representative Cathy Engstrom Munoz, Co-Chair  
Representative John Harris  
Representative Wes Keller  
Representative Charisse Millett  
Representative Sharon Cissna  
Representative Berta Gardner

**MEMBERS ABSENT**

All members present

**COMMITTEE CALENDAR**

HOUSE BILL NO. 121

"An Act relating to a municipal property tax credit for an improvement that aids in improving air quality."

- MOVED HB 121 OUT OF COMMITTEE

HOUSE BILL NO. 134

"An Act relating to the terms and conditions of commercial vessel permits for the discharge of graywater, treated sewage, and other waste water; and providing for an effective date."

- MOVED CSHB 134(CRA) OUT OF COMMITTEE

**PREVIOUS COMMITTEE ACTION**

BILL: HB 121

SHORT TITLE: MUNICIPAL AIR QUALITY PROPERTY TAX CREDIT

SPONSOR(S): REPRESENTATIVE(S) COGHILL

02/09/09	(H)	READ THE FIRST TIME - REFERRALS
02/09/09	(H)	CRA, FIN
02/17/09	(H)	CRA AT 8:00 AM BARNES 124

BILL: HB 134

SHORT TITLE: CRUISE SHIP WASTEWATER DISCHARGE PERMITS

SPONSOR(S): REPRESENTATIVE(S) HARRIS

02/13/09 (H) READ THE FIRST TIME - REFERRALS  
02/13/09 (H) CRA, RES  
02/17/09 (H) CRA AT 8:00 AM BARNES 124

**WITNESS REGISTER**

KAREN LIDSTER, Staff  
Representative John Coghill  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** Presented HB 121 on behalf of the sponsor.

LYNN TOMICH KENT, Director  
Division of Water  
Department of Environmental Conservation (DEC)  
Anchorage, Alaska

**POSITION STATEMENT:** Urged swift passage of HB 134.

JOHN BINKLEY, President  
Alaska Cruise Association  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

CHIP THOMA, President  
Responsible Cruising in Alaska (RCA)  
Juneau, Alaska

**POSITION STATEMENT:** Testified that HB 134 is premature.

BOB WEINSTEIN, Mayor  
City of Ketchikan  
Ketchikan, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

WAYNE STEVENS, President/CEO  
Alaska State Chamber of Commerce  
Juneau, Alaska

**POSITION STATEMENT:** Urged adoption of HB 134.

JENNIFER GIBBINS, Executive Director  
Prince William Soundkeeper  
Cordova, Alaska

**POSITION STATEMENT:** Characterized HB 134 as premature.

STAN STEVENS  
Valdez, Alaska

**POSITION STATEMENT:** Testified in support HB 134.

KURT HARDCASTLE, Commercial Fisherman  
Taku River Red  
Juneau, Alaska

**POSITION STATEMENT:** During hearing of HB 134, emphasized the need to consider the volume of discharge.

KAREN HESS, Owner  
River Adventures  
Haines, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

CHRIS ANDERSON, Co-Owner  
Glacier BrewHouse and Orso  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

ROBERT SHEER, Owner  
Great Alaskan Lumberjack Show  
Ketchikan, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

SHAUNA LEE, Manager  
Great Alaskan Lumberjack Show  
Ketchikan, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

LEN LAURANCE, Marketing Consultant  
Ketchikan, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

KATHY WASSERMAN, Executive Director  
Alaska Municipal League (AML)  
Juneau, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

JEREMY GIEZER, Member  
Board of the Alaska Travel Industry Association (ATIA) - Juneau  
Chapter  
Juneau, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

JASON BRUNE, Executive Director  
Resource Development Council (RDC)  
Anchorage, Alaska

**POSITION STATEMENT:** Testified in support of HB 134.

## **ACTION NARRATIVE**

[8:01:58 AM](#)

**CO-CHAIR BOB HERRON** called the House Community and Regional Affairs Standing Committee meeting to order at 8:01 a.m. Representatives Herron, Munoz, Harris, and Millett were present at the call to order. Representatives Keller, Cissna, and Gardner arrived as the meeting was in progress.

HB 121 - MUNICIPAL AIR QUALITY PROPERTY TAX CREDIT

[8:02:24 AM](#)

CO-CHAIR HERRON announced that the first order of business would be HOUSE BILL NO. 121, "An Act relating to a municipal property tax credit for an improvement that aids in improving air quality."

[8:03:06 AM](#)

KAREN LIDSTER, Staff, Representative John Coghill, Alaska State Legislature, relayed that one of the dynamics of living in the Alaska is the cold and the inversions that occur. She then informed the committee that in 2006 the Environmental Protection Agency (EPA) increased the stringency of the particulate matter 2.5 standard. In 2007 the EPA defined the requirements for state's to clean the air in areas where the fine particulate pollution didn't meet the national air quality standard; these were referred to as nonattainment areas. Nonattainment areas had three years to submit a plan to EPA that included enforceable measures to reduce air pollution emissions and show how reasonable progress would be made to attain that standard. These standards must be achieved no later than 2015.

MS. LIDSTER explained that as Fairbanks North Star Borough and other communities seek ways in which to meet air quality standards, they wanted more than just restrictions and enforcement-based options. This legislation provides the aforementioned in the form of an optional tax credit. The legislation provides an incentive to citizens to make improvements to their home and business that improve the community's air quality. The language in HB 121 requires that eligibility conditions and other criteria be established by local ordinance to address local community needs. Ms. Lidster pointed out that nonattainment areas are a public as well as an

economic issue. In fact, Federal Highway Administration funds could be lost or new projects denied. This legislation will help communities provide incentives that promote a healthy economy for residents. In closing, Ms. Lidster requested the committee's support for HB 121.

[8:05:49 AM](#)

REPRESENTATIVE HARRIS offered his understanding that HB 121 is permissive not mandatory and merely encourages people to install systems that promote healthier air.

MS. LIDSTER concurred on both counts.

[8:07:05 AM](#)

REPRESENTATIVE GARDNER asked whether there has been any indication that the Fairbanks North Star Borough would implement this if HB 121 passes. She also asked what would happen if the borough implemented the program and it was wildly successful with many participants, and the property tax receipts in Fairbanks decreased.

MS. LIDSTER related her understanding that the Fairbanks North Star Borough is very interested in the passage of HB 121 and having the option to use incentives to encourage its residents to help with air quality. Ms. Lidster surmised that were the program to be wildly successful, the borough would review the impact of a reduction in the tax at the local level since the incentive would be a local ordinance.

[8:08:52 AM](#)

REPRESENTATIVE HARRIS surmised, then, that the portion of the property tax that is allowed to be credited would be for the expense of installing a new system, which wouldn't occur each year. He further surmised that an individual would have to provide proof of improvements to air quality that would qualify for the proposed credit.

MS. LIDSTER stated her agreement.

[8:09:34 AM](#)

CO-CHAIR MUNOZ moved to report HB 121 out of committee with individual recommendations and the accompanying zero fiscal

note. There being no objection, HB 121 was reported from the House Community and Regional Affairs Standing Committee.

HB 134 - CRUISE SHIP WASTEWATER DISCHARGE PERMITS

[8:10:43 AM](#)

CO-CHAIR HERRON announced that the final order of business would be HOUSE BILL NO. 134, "An Act relating to the terms and conditions of commercial vessel permits for the discharge of graywater, treated sewage, and other waste water; and providing for an effective date."

[8:10:59 AM](#)

CO-CHAIR MUNOZ moved to adopt the proposed committee substitute (CS) for HB 134, Version 26-LS0570\E, Bullard, 2/16/09, as the work draft. There being no objection, Version E was before the committee.

[8:11:39 AM](#)

REPRESENTATIVE HARRIS, speaking as the sponsor of HB 134, began by explaining that Version E was necessary because of the change to the title of the legislation to conform to the language of the body of the legislation. Following "**commercial**" the word "passenger" was inserted. The intent of this legislation is to provide the Department of Environmental Conservation (DEC) the ability to implement the law as it sees fit. Currently, the cruise ship initiative restricts DEC's ability to implement its regulations. He noted that this isn't the first amendment to the initiative. He reminded the committee that the first amendment, House Bill 217, to the initiative was by Representative Lindsey Holmes and amended the disclosures portion of the initiative. The second amendment, Senate Bill 121, to the initiative was by Senator Kim Elton and addressed the discharge from smaller cruise ships. Both of the aforementioned amendments to the initiative passed overwhelmingly.

REPRESENTATIVE HARRIS opined that one must ask what the intent was when Alaskans passed the cruise ship initiative. Certainly, everyone would agree the intent was to strengthen environmental regulations involving discharges of large cruise ships. This proposed legislation, HB 134, doesn't diminish the standards. The legislation merely provides DEC with more tools to implement the standards. He reminded the committee that prior to the

passage of Proposition 2, standards were established in 2001 by House Bill 260, which passed in both bodies overwhelmingly. Representative Harris acknowledged that some might say that there are other methods by which the [cruise ship] industry can be made to comply. However, those methods won't be precluded by the passage of HB 134. This proposed legislation merely provides DEC the ability to test in a slightly different manner than under the current initiative. Furthermore, HB 134 won't stop the industry from having to implement new and modern technology, if DEC so chooses.

[8:16:36 AM](#)

REPRESENTATIVE HARRIS noted a recent Anchorage Daily News article in support of HB 134. He assured the committee that he isn't opposed to keeping the environment clean and is proud that Alaskans have looked at the issues and attempted to make the state a cleaner and better place, in relation to environmental standards, to live. From the Anchorage Daily News article entitled "Our View: Cruise Law Amendment" he read the following excerpts:

So we yes to the Harris amendment, but with this addition -- require both the cruise industry and DEC to report on the latest practical technologies for the cleanest effluent, and give DEC the authority to require those, at least as pilot programs, within a reasonable time frame.

Don't let the perfect be the enemy of the good; cruise pollution controls are vastly improved over 10 to 15 years ago. What they discharge is much cleaner than what Alaska cities pour into Alaska waters every day. Give the cruise lines some leeway.

REPRESENTATIVE HARRIS, in conclusion, asked the committee for a favorable review of HB 134.

[8:19:32 AM](#)

REPRESENTATIVE GARDNER related her understanding that yesterday DEC published a report regarding the technologies available. She expressed interest in obtaining that report prior to voting on HB 134.

REPRESENTATIVE CISSNA offered her understanding that there is a presentation regarding the available technology [for cruise

ships to use with wastewater treatment]. She asked if the committee is planning to report HB 134 from committee today.

CO-CHAIR HERRON specified that it's the intent of the co-chairs to take all testimony today and then consider [action on HB 134].

REPRESENTATIVE HARRIS interjected that the presentation to which Representative Cissna is referring won't make any difference because the DEC can still mandate the best available technology. The initiative bound the hands of DEC with regard to where and how it can test. Tomorrow's presentation will likely specify what types are the best available technologies. He reiterated that HB 134 doesn't keep DEC from mandating the best available technology.

8:22:49 AM

REPRESENTATIVE CISSNA related her belief that it's important not to hurry to obtain forthcoming information.

CO-CHAIR HERRON mentioned that he was going to request that the department provide a preview of the presentation that will occur tomorrow.

8:24:17 AM

LYNN TOMICH KENT, Director, Division of Water, Department of Environmental Conservation (DEC), relayed that DEC has been implementing the cruise ship initiative passed by voters in 2006. The initiative included the following three main environmental provisions: to have an ocean ranger on board, to report the vessel's location hourly to DEC, and for those vessels wishing to discharge wastewater to obtain a wastewater discharge permit from DEC. The initiative requires an ocean ranger or a U.S. Coast Guard licensed marine engineer to be on board all large cruise vessels entering Alaska's waters. The purpose of the ocean rangers' presence is to observe the vessel's compliance with state and federal environmental, sanitation, health, and safety rules. The aforementioned program is funded by a \$4 per birth fee and nets about \$4 million per year, which is about how much the department invests in the program each year. She then highlighted that DEC implemented a pilot program during the 2007 cruise ship season during which the department tried to learn about the program and what it would take to implement it. The training needs for the ocean rangers were reviewed and a check list for their

observations was developed. The department learned all about making reservations for every cruise ship coming to Alaska, scheduling of ocean rangers, and how ocean rangers would communicate with DEC while onboard the vessels. The full implementation of the ocean ranger program began with the 2008 cruise ship season. She informed the committee that an ocean ranger was on board 88 percent of the voyages in Alaska waters. The other vessels were visited while in port in Alaska. During that time, over 2,000 daily reports were received from the ocean rangers through which 126 incidents were learned about and required follow up. Almost all of the aforementioned incidents were addressed by the vessel when brought to the attention of the environmental officer onboard the vessels.

MS. TOMICH KENT then turned to the vessel tracking requirement. All of the vessels complied with this requirement and DEC has used this information to verify compliance. The wastewater permit portion of the initiative required large cruise ships to obtain a wastewater permit from DEC and comply with Alaska's water quality standards at the point of discharge. The aforementioned is the language with which the department is concerned. Ms. Tomich Kent explained that Alaska's water quality standards are regulations that describe how clean the state's fresh and marine waters must be in order to protect various uses. The department protects the waters for drinking purposes, contact recreation, and aquatic life. The standards apply to the water body and not directly to a wastewater discharge, except in the case of discharges from large cruise ships where the discharges must meet the water quality standards at the point of discharge. Last March, DEC developed and issued a general permit that contains long-term effluent limits for things such as ammonia, copper, nickel, and zinc that are based on the water quality standards. She noted that by the terms of the permit issued, these effluent limits must be met by the 2010 cruise ship season. The permit also contains a compliance schedule and interim limits that are less stringent for the 2008-2009 cruise ship seasons.

MS. TOMICH KENT offered her understanding that HB 134 would allow DEC, under certain circumstances, to authorize mixing zones for treated wastewater that's discharged from cruise ships. She explained that a mixing zone is an area within the receiving water body in which the water quality standards can be exceeded while the wastewater has a chance to mix with the receiving waters. The water quality standards, she stated, have to be met at the edge of that authorized mixing zone. The DEC has been researching the science surrounding cruise ship

wastewater for many years and most recently has been engaged in a series of studies some of which have been done in conjunction with the EPA regarding how cruise ship discharges mix with the receiving waters.

[8:29:13 AM](#)

MS. TOMICH KENT informed the committee that all of the large cruise ship vessels that discharge into Alaska's waters have installed advanced wastewater treatment systems, which produce a very high quality effluent. During the 2008 cruise ship season, 20 of the 31 large cruise ships that call on Alaska discharged in state waters and were covered under the state's general permit. Under the terms of the permit, 206 effluent samples were taken, each of which was analyzed to determine the concentration of 9 different parameters. She noted that DEC is most concerned about the following four parameters: ammonia, copper, nickel, and zinc. Of 824 data points, the interim permit limits were exceeded in 36 instances, which amount to about 4 percent. The most frequent parameter that exceeded the limits was for ammonia, 21 of the 31 samples. Ms. Tomich Kent then related that there were 563 instances in which the same four parameters for the stricter long-term permits in 2008 were exceeded. The aforementioned relates that about 68 percent of the data points would exceed the long-term effluent limits. The long-term effluent limits, she clarified, are based on the water quality standards.

MS. TOMICH KENT then expressed the need to understand the effects of the cruise ship discharges on Alaska's waters. In order to do so, the quality of the wastewater that's discharged must be reviewed as well as the dilution to which the wastewater is subject when it hits the receiving water body. The aforementioned information is used to estimate whether the wastewater would cause exceedances of the water quality standards in the receiving water body. A few years ago, DEC created a science advisory panel to review the results of a field study the EPA conducted in 2001. The EPA was reviewing the impact of discharges on Alaska waters when the vessel is under way. The science panel determined, she relayed, that when a typical large cruise ship is moving at a minimum speed of six knots, the wastewater discharge is subject to tremendous dilution. If the vessel is discharging at 200 cubic meters per hour, the dilution factor is 50,000. Therefore, the science panel concluded that the wastewater would almost instantaneously meet the water quality standards in the receiving water body.

MS. TOMICH KENT noted that during the last legislative session, the legislature directed DEC to evaluate how treated cruise ship effluent mixes with and dilutes in the receiving waters. This past season the study was conducted in Skagway in conjunction with an EPA research vessel. An interim report was provided to the legislature in January. In summary, the study was designed to collect field data in order to calculate the dilution that occurs to wastewater when discharged through the worst case scenarios, which is from a stationary vessel into a confined receiving environment with very limited flushing. The results of the study were mixed, she stated. Under certain assumptions water quality standards would be met in the receiving water within 15 meters of the vessel and under other assumptions a greater distance from the vessel would be required to achieve the water quality standards. Therefore, while the work isn't complete, it suggests that in certain worst case scenarios mixing zones may not be appropriate for vessels that are moored.

MS. TOMICH KENT confirmed that DEC is also reviewing wastewater treatment technologies. She related that DEC isn't aware of treatment systems that would produce effluent meeting water quality standards without the use of mixing zones and that are readily available to be installed on all vessels by the 2010 season. She noted that there are shore-based technologies that can achieve the aforementioned. Currently, DEC is investigating the cruise lines efforts to reduce ammonia, copper, nickel, and zinc in their wastewater effluent. The cruise lines are reviewing potential source reduction and evaluating what types of products brought on board the vessel that might contain those substances and whether those can be reduced. The cruise lines are also reviewing new treatment technologies. Ms. Tomich Kent highlighted that DEC has retained a consultant to evaluate new and emerging technologies that could potentially be installed on cruise ships to meet the water quality standards at the point of discharge. A draft report is available for review and has been posted on DEC's web site. Tomorrow there will be a wastewater treatment technology workshop in Juneau at which there are expected to be national and international participants. The information obtained from the aforementioned workshop will further refine the draft report. The hope, she relayed, is to issue a final report by mid April.

[8:35:05 AM](#)

MS. TOMICH KENT pointed out that in light of HB 134, DEC looked at the existing regulations. Currently, there are regulations that allow other non-cruise ship permittees to apply for a

mixing zone with their permit. The regulations include a 19-part test that must be met prior to DEC authorizing a mixing zone. The aforementioned test includes a requirement that the effluent is first treated to remove, reduce, and disperse the pollutants using the most effective, technologically, and economically feasible methods. The regulations also include an anti-degradation policy that requires the use of "methods of pollution prevention, control, and treatment found by the department to be the most effective and reasonable." The aforementioned policy also requires that wastes and other substances to be discharged "be treated and controlled to ensure to achieve the highest statutory and regulatory requirements."

MS. TOMICH KENT explained that if mixing zones were allowed, DEC would modify the cruise ship wastewater discharge general permit to include mixing zones where appropriate. She noted that any proposed permit modifications require public notice and review. She related that mixing zones may be prohibited in some areas and only allowed in other areas under conditions that would fully protect aquatic life and other uses of Alaska's waters. Furthermore, a modified permit would still require the use of best available treatment technologies. She mentioned that current water quality regulations prohibit backsliding in treatment technology or decreases in effluent quality. Therefore, a change in the rule that would allow mixing zones wouldn't allow a cruise ship to remove the high level of treatment technology that is already on board nor could they reduce the quality of the effluent they produce. She related that every five years when the general permit is reviewed, DEC must reevaluate what comprises best available treatment technologies. Any renewed permits are appropriately modified to reflect any new, commercially available treatment technologies. She noted that HB 134 has no fiscal impact for DEC.

[8:37:32 AM](#)

REPRESENTATIVE GARDNER posed a scenario in which HB 134 passed as written and DEC learns at the aforementioned workshop of new technology that is cost effective and meets the requirements of the initiative. In such a situation, she asked if DEC could require the use of such technology.

MS. TOMICH KENT replied yes.

[8:38:51 AM](#)

JOHN BINKLEY, President, Alaska Cruise Association, related support for HB 134. The purpose of HB 134, he opined, is to correct an error made in the initiative. Therefore, he characterized the legislation as a technical amendment that actually carries out the will of the people. Through the public record and statements by the initiative sponsors it was very clear that the intent of the permitting provision of the initiative was to level the playing field. In fact, initiative sponsor Joe Geldhof said, "This would make the cruise industry adhere to the same pollution standards as fisheries, municipalities, and gas and oil companies." He then offered a further quote by Gershon Cohen, one of the primary writers of this provision: "If passed, the new initiative will level the economic and environmental playing field between the cruise ship industry and other major dischargers of polluted waste into Alaska waters." The aforementioned is exactly what HB 134 would accomplish.

[8:40:57 AM](#)

MR. BINKLEY offered his understanding that HB 134 gives the authority [regarding permitting decisions] to DEC to make decisions as it's very difficult to legislative complicated permitting issues. He opined that those in the cruise industry have complete confidence in DEC and the permitting process. In conclusion, he urged the swift passage of HB 134.

[8:42:55 AM](#)

CHIP THOMA, President, Responsible Cruising in Alaska (RCA), began by informing the committee that yesterday DEC issued a draft feasibility study on reducing the concentrations of dissolved metals and ammonia in large passenger ships. He provided that report as well as written testimony from Dr. Cohen to the committee. Mr. Thoma then turned to the amendments to the initiative and informed the committee that there was an amendment to remove the ocean rangers' provision last year, but that failed in the House. Furthermore, in 2001 House Bill 260 occurred in special session because the legislature wasn't able to pass legislation that year. Mr. Thoma related that the Anchorage Daily News has always supported the initiative and is trying the best it can to develop a compromise. He related agreement with yesterday's editorial in the Anchorage Daily News. Mr. Thoma then directed the committee's attention to the executive summary of the feasibility study, which specifies that more information is needed, which is what the conference tomorrow will accomplish. The feasibility study says:

"However, this draft study finds that technologies exist in land-based applications that appear to be able to treat the pollutants (ammonia, nickel, copper, or zinc) to the necessary levels for discharge." Mr. Thoma stressed that he is only interested in ammonia and copper since those are the pollutants that impact marine life and anadromous salmon. He related his satisfaction that the sewage, air, and other areas being regulated are being done well. The two most promising systems are reverse osmosis (RO) and aerobic biological oxidation/nitrification (MBR), both of which would likely provide the adaptable systems to achieve the limits.

MR. THOMA then turned to Dr. Cohen's written testimony, specifically paragraph three where it states: "By definition, the State's WQS represent the best scientific information regarding the protection of aquatic life." He then highlighted paragraph four of Dr. Cohen's testimony, which states: "Mixing zones are not based on biological science or toxicology; they are engineering-based risk analyses ...." Page 2, paragraph five of Dr. Cohen's written testimony says, "Poor performance by other discharges does not justify allowing the cruise lines to seek the lowest common denominator of waste treatment. It is important to note that many of their 'peers' are using equipment designed in the 1950's, built in the 1970s, ...." Mr. Thoma then highlighted page 2, paragraph four, in which Dr. Cohen says, "... we heard the same cry from this industry when Alaska demanded they do a better job of removing fecal bacteria from their waste streams. They said such performance was impossible. ... Today, two thirds of the fleet that comes to Alaska has these improved technologies on board." Page 3 of Dr. Cohen's testimony specifies, "The authorization of mixing zones is fundamentally illogical. Our oceans are finite and putting more pollutants into our waters must at some point result in deleterious impacts on our fisheries." Mr. Thoma reiterated that tomorrow's conference will address the available technologies and the cost to cure cruise ship discharges.

MR. THOMA then paraphrased from his written testimony, which read as follows [original punctuation provided]:

The RCA is an advocacy group that helped win the 2006 initiative measure on cruise ship pollution, fair taxes, and consumer protection. This initiative passed 52-48%. 82,000 Alaskans voted yes.

The Alaska cruise law has been a great success for state taxes, revenue sharing, capital project in

cruise ports, pollution controls, monitoring by Ocean Rangers, and passenger consumer protection.

To address HB 134, my helpful comment is that the legislation is premature and likely unnecessary. Many ships in the Alaska cruise fleet are already meeting our Water Quality Standards on both ammonia & copper, those discharged substances that most harm anadromous salmon and marine life.

I recently reviewed the Notices of Violations (NOV's) issued by DEC for 2009 cruise ship discharges, and was amazed to find that  $\frac{1}{4}$  of the fleet were not cited for any metals violations, but that 5 of the 7 metals violators are Princess ships. I believe the copper problem has now been identified: those high discharges are centered in OLDER ships, like the Princes fleet, whose copper plumbing is leaching into treated discharge water. Dissolved copper is a big problem: it never goes away, it builds up in the water, and dis-orientes returning salmon. But most other ships have solved the on-board copper problem, by using flex-hose plastic plumbing, a 21<sup>st</sup> century fix for a 20<sup>th</sup> century problem.

[8:48:47 AM](#)

MR. THOMA continued:

Rather than get into details of ship plumbing and on-board water-making machinery, suffice it to say that copper pipes leach, and miles and tons of copper pipe leach a lot. Copper leaching from cruise ship plumbing will be discussed thoroughly tomorrow at DEC's 2009 conference on new technologies. I hope you can attend.

The gold sheet in your packet lists the different copper and ammonia-removing processes that will be discussed by industry and DEC, for both effectiveness and cost. This removal technology is improving at a very rapid pace, pioneered by the need for absolutely clean water in US computer manufacture. I'm confident that copper can soon be removed from all cruise ship discharges. That's why HB 134 is premature, because solutions are close at hand. DEC and the cruise

industry will start solving them, tomorrow, here in Juneau.

Regarding ammonia on board ships, the sole source is urine. Ammonia removal has been achieved, and this technology is readily available. Ironically, the relatively high ammonia counts are likely due to low-flow toilet systems on some ships, where little water is used to flush. Since water dissolves urine and ammonia to manageable levels, I am also confident that all ammonia problems will be solved on-board, as most ships in the Alaska fleet are doing right now.

In conclusion, HB 134 is premature, because copper & ammonia discharge problems will be solved soon, with science, funding, and plastic plumbing. The cruise passengers want clean ships. Alaska subsistence, commercial & sport users want clean ships that take no chances to harm Alaska fish & marine resources. We should all agree to fully protect clean, marine waters, by statute.

The cruise laws passed in 2006 accomplish that. However, HB 134, the Princess Pollution bill, rolls back those protections and allows potentially harmful discharges. Also, [HB] 134 would primarily exempt one cruise line from the water quality standards being met by most of the 28 ships in Alaska fleet. HB 134 thus financially penalizes those who make discharge improvements, and now comply with Alaska cruise law. Finally, Alaskans want these discharge problems solved on board the cruise ships, not mixing in our pristine waters.

MR. THOMA, in response to Representative Harris, clarified that his statement referring to HB 134 as the Princess Pollution bill is his opinion. He specified that [his statement] is based on the notices of violations, which are issued by DEC. He then pointed out that the committee members' packets should also include a document entitled "Key Disciplines" that is a list of sensor devices that are utilized with both medical and marine applications. The aforementioned is the type of equipment needed for many of the cruise ships.

[8:52:27 AM](#)

REPRESENTATIVE MILLETT asked whether any of the land-based technologies are being used in Alaska.

MR. THOMA said that he would find that out tomorrow. However, he noted that Oasis Environmental consultants with DEC are very familiar with [the land-based technologies].

[8:52:59 AM](#)

BOB WEINSTEIN, Mayor, City of Ketchikan, related the City of Ketchikan's support for HB 134. He noted that in October 2008 Ketchikan's City Council passed a resolution which requested legislation to modify, based on science, the standards governing the discharge of cruise ship wastewater. He related his understanding that HB 134 is designed to remove an arbitrary standard established by the initiative process and allow it to be replaced by a scientific standard. The principal public focus of the initiative, he reminded members, was on a \$50 head tax not on an arcane environmental-related provision. Mr. Weinstein opined that water quality standards should be established by the application of principles of sound science not by the application of politics. While Mr. Weinstein said he respected the initiative process, he highlighted that the founding fathers of the state provided for an amendment or repeal of an initiative after two years. If environmental standards were established in a similarly punitive manner, by initiative, for the oil, fishing, and other industries, Alaska would hardly have any industry at all. "The application of the standard imposed by initiative, in the absence of practical and readily available technology, will result in cruise vessels traveling outside state waters for discharge in federal waters. This will result in either less visits or shorter visits to port communities like Ketchikan, with adverse economic impacts upon us," he said. In conclusion, Mr. Weinstein related his observation that the cruise industry has made great improvements and significant investments in technology to improve water and air quality standards without the initiative. This legislation, by removing an arbitrary standard, will allow DEC to do its job: to protect water quality in state waters. He urged support for HB 134.

[8:57:12 AM](#)

WAYNE STEVENS, President/CEO, Alaska State Chamber of Commerce, related the Alaska State Chamber of Commerce's support of the legislature's efforts to amend the point of discharge standard governing cruise ship wastewater permits. To that end, the

Alaska State Chamber of Commerce has adopted the aforementioned as one of its top five priorities and urges the adoption of HB 134. Furthermore, the Alaska State Chamber of Commerce asks that the state apply the best available data and technology when setting standards for cruise ship wastewater discharge permits. The DEC, he pointed out, holds cruise ships and the state's ferries to a different standard than every other discharger in Alaska. He further pointed out that this new permit measures effluent at the point of discharge rather than allowing a dilution zone, which every other state allows and Alaska's statutes contemplate. Moreover, this permit measure is a different standard than what is required for coastal communities, the fishing industry, or oil platforms in Cook Inlet. Mr. Stevens said, "We strongly urge the legislature to give due consideration to modifying the standards governing the discharge of our ... cruise ship wastewater for a lower level based on science that will continue to protect aquatic life and the environment but will not be technologically and financially unreasonable or impractical." He echoed earlier testimony that if the cruise ship industry has to comply with statutes of this permit, cruise ships will have to hold their wastewater discharge until outside of Alaska waters. The aforementioned will result in a shortened time in port and may result in fewer ports of call, both of which may negatively impact Alaska businesses and port communities. He suggested that small businesses that offer services to tour-related businesses may well go out of business without the suggested modifications. Although voters were told that cruise ships would be held to the same [discharge] standard as every other industrial and municipal discharger and no new permitting program was necessary, the permit issued by DEC holds the cruise ships to a much different standard. Mr. Stevens highlighted that Alaska's water quality standards contemplate the use of dilution factors, such as mixing zones or short-term variances. According to DEC, without mixing zones wastewater would have to be treated to the point at which it could serve as a source of drinking water before discharge. The aforementioned isn't feasible in Alaska or anywhere else. Sewage treatment plants, seafood processors in Alaska couldn't operate without mixing zones, which is also true for cruise ships, he opined. Alaska should hold cruise ships to the same standard as coastal communities, he said. Furthermore, it's not in the state's best interest to shorten the time cruise visitors have ashore or to force the elimination of some ports of call. In conclusion, Mr. Stevens highlighted that plastic pipe comes from oil and gas, and therefore if copper pipes are eliminated and replaced with plastic that would seem to infer support for additional drilling.

9:01:21 AM

JENNIFER GIBBINS, Executive Director, Prince William Soundkeeper, began by relating that the mission of the Prince William Soundkeeper is to protect water quality in Prince William Sound. The board and membership of the Prince William Soundkeeper is comprised of residents of all five communities in Prince William Sound. She opined that the voters weren't confused when they passed this initiative. The intent is to protect the water upon which the state's environment, culture, and economy depend. She stressed that the most important message is that this can be done. Ms. Gibbins then reminded the committee that Prince William Sound is still recovering from the effects of the Exxon Valdez Oil Spill. Furthermore, Alaska has recently had its first warning about the consumption of fish. The metals at issue are serious and their accumulation in the environment should be taken very seriously. "Pollution, after all, is pollution," she said.

MS. GIBBINS opined that HB 134 isn't a small or insignificant change to the law. She characterized HB 134 as premature. The [initiative] standards can be met, and therefore she suggested that the committee's discussions would be best spent focusing on how to motivate industry to comply. She related she asked John Binkley and Bruce Bustamante what the cruise industry has done since the initiative to comply and they couldn't answer. Ms. Gibbins informed the committee that in addition to being an environmentalist, she serves on the local chamber of commerce and has a background in destination marketing for the hospitality industry. She opined that she supports the tourism industry, and doesn't believe the state should abandon the standards that set Alaska apart. Perhaps the new technology would make it possible to comply by 2010 or perhaps the industry needs more time, she remarked. She then indicated that the head tax could be used to incentivize the cruise industry to comply.

9:05:10 AM

STAN STEVENS testified in support of HB 134, which he opined protects the state's water quality standards by allowing DEC to still monitor the cruise ships and maintain the best available technology through sound science. The cruise ships have brought their air and water quality standards to a level that's better than that in the state's coastal communities and other vessel users. There are many vessels, he pointed out, that aren't meeting a lot of these standards. He opined that HB 134 allows

realistic regulations while maintaining a clean marine environment. In conclusion, Mr. Stevens applauded the sponsor of HB 134 as it maintains the state's water quality standards and solves a difficult problem.

[9:06:40 AM](#)

KURT HARDCASTLE, Commercial Fisherman, Taku River Red, informed the committee that he is a marine engineer and has worked with marine sanitation systems from Mexico to Alaska and Hawaii. He noted that he also has a bit of experience in the marine environment and the discharges that are involved. The cruise ship industry has its work cut out for it, he opined. With regard to discharges, Mr. Hardcastle said that [the concern] isn't the concentration of the discharges but rather the volume of them. The volume of discharge is 1 million per season, possibly twice a day in Southeast Alaska waters. The aforementioned is more than the entire State of Alaska discharging in Southeast Alaska waters.

MR. HARDCASTLE related that he has been, in, around, and on cruise ships for many years. In fact, he noted that he has worked in the cruise ship industry for about four years. Furthermore, he said that he has witnessed the discharge and believes that some cruise ships discharge within reason while others he would question due to the three to four foot high foam bubble that smells like sewage. He reiterated that the concern is the volume of the discharge. Mr. Hardcastle referred to the January 2009 edition of Alaska's Economic Trends, which lists commercial fishing as the stabilizing influence on Alaska's economy during the upcoming economic storm. He said that he isn't opposed to HB 134, but would like the committee to consider the volume of the discharge and avoid jeopardizing a food source that is shipped outside the state.

[9:11:06 AM](#)

KAREN HESS, Owner, River Adventures, related her support for HB 134 and noted that the committee packet should include a letter from her. She then relayed that two years ago she was very involved in the initiative, particularly the disclosure statement. When signatures for the initiative were first gathered, she had a conversation with a signature gatherer regarding concerns with the disclosure statement of the initiative. The signature gatherer said that if there are problems with the disclosure statement, the legislature will fix it if the initiative passes. Ms. Hess then informed the

committee that the 2010 cruise ship itineraries are being finalized now. She indicated that HB 134 would allow DEC to implement whatever new technology or program and mandate it for the ships, and thus the ships can plan their itineraries and continue to come to Alaska. She concluded by urging passage of HB 134.

[9:14:16 AM](#)

CHRIS ANDERSON, Co-Owner, Glacier BrewHouse and Orso, stated his support for HB 134. As one of the largest sellers of seafood in a restaurant environment in Anchorage, he said he understands the need for a clean, safe marine environment. However, he expressed concern over the potential loss of the cruise ship industry, which could adversely impact his restaurant and employees. Therefore, Mr. Anderson requested support for HB 134 and that everyone work together to ensure Alaska continues to have a clean, safe, and growing visitor industry.

[9:15:49 AM](#)

ROBERT SHEER, Owner, Great Alaskan Lumberjack Show, told the committee that living in Ketchikan with its close proximity to the marine environment and being in the tourism industry for the last 10 years afforded him the opportunity to access certain governing rules and regulations of the industry. He opined that there was great prejudice in crafting the head tax initiative, which had unintended consequences for the tourism industry. The language of the [initiative] overstepped what were areas governed by DEC. The impacts to the [tourism] industry could result in the loss of thousands of jobs and tens of millions of dollars over time. He informed the committee that he, for his business alone, pays in excess of \$120,000 in local real estate and sales taxes. Furthermore, [the Great Alaskan Lumberjack Show] employs up to 35 individuals with a payroll of over \$700,000. As an owner of an Alaskan tourism business, Mr. Sheer related his support for HB 134.

[9:19:10 AM](#)

SHAUNA LEE, Manager, Great Alaskan Lumberjack Show, related that members should already have a letter from her in support of HB 134. This legislation will allow the cruise ship industry to conduct business in a scientifically reasonable way. The cruise industry has made great strides in cleaning its emissions standards to some of the highest in the world. Therefore, whatever can be done to make the industry feel welcome is of the

utmost importance to the economy, particularly the economy of Southeast Alaska. By requiring the cruise ship industry to meet standards that are impossible to meet at this time, the state is raising a barrier to an industry that's supporting many Southeast Alaska towns.

[9:20:08 AM](#)

LEN LAURANCE, Marketing Consultant, explained that he represents companies that provide shore excursions to cruise ship passengers. These companies include Tae Kwon Air, Alaska Rainforest Sanctuary, Alaska Canopy Adventures, Seahorse Ventures, and Experience Alaska Tours. Collectively the aforementioned companies employ 225 people. The aforementioned companies urge passage of HB 134 as they are very sensitive to the environment and place environmental concerns before anything else. Over the last 10 years, the cruise ship industry has made great strides in the handling of wastewater. Currently, the cruise ship industry is trying to meet standards that aren't based on science. This legislation, HB 134, he surmised, would allow DEC to enforce wastewater discharge on a scientific basis. Therefore, he urged passage of HB 134.

[9:21:41 AM](#)

KATHY WASSERMAN, Executive Director, Alaska Municipal League (AML), related support for HB 134. She noted that AML passed a resolution that requested modification of the standards governing the discharge of cruise ship wastewater. The discussion that took place during the debate of that resolution centered on the belief that the process should be handled through DEC, she related. The discussion also focused on the need, particularly in these hard economic times, to review anything that might inhibit municipalities from having businesses or industries that help communities survive.

[9:23:57 AM](#)

JEREMY GIEZER, Member, Board of the Alaska Travel Industry Association (ATIA) - Juneau Chapter, related that the Juneau Chapter of ATIA, which is nearly 70 local tourism and tourism-related businesses in Juneau, is in support of HB 134. He mentioned that the statewide chapter of ATIA has moved a letter of support for HB 134. The organization believes that the experts should do the job, and thus it's a matter of giving the control to DEC to regulate cruise ship discharge. The concern is that if the law is allowed to stand as it is today, it will

negatively affect business and the amount of business that occurs. He pointed out that just because the technology is available, it doesn't mean that cruise lines will necessarily implement that technology in Alaska waters. Some of the cruise ships, he opined, will opt to [discharge] outside Alaska waters, which will reduce the hours in port and even eliminate some port calls. The aforementioned should be considered, he opined.

[9:25:59 AM](#)

JASON BRUNE, Executive Director, Resource Development Council (RDC), related that RDC is in support of HB 134. He then reminded the committee that the RDC is a statewide, nonprofit, membership-funded organization founded in 1975. The purpose of RDC is to link the diverse interests of its membership together to encourage a strong, diversified private sector in Alaska while expanding the state's economic base through the responsible development of the state's natural resources, including tourism resources. He opined that setting standards for discharges through the initiative process, regardless of the industry, isn't appropriate. What was put in place by this initiative would have precluded the discharge of tap water from Anchorage, Fairbanks, or any other port community. As legislators, new investment in the state should be encouraged by allowing reasonable and attainable standards for all industries. By correcting this error, DEC will have the tools to use the best available science, as they do with all agencies in the state, to establish safe discharge limits. Mr. Brune concluded by encouraging the committee vote in favor of 2009.

[9:28:03 AM](#)

MR. BINKLEY said that HB 134 will simply allow DEC to make discharge determinations based on the best science and technology available. The industry, he assured members, embraces new technology as well as decisions based on science. He related that in the late 1990s and early 2000s the Alaska Cruise Association worked closely with the scientific panel Ms. Tomich Kent mentioned earlier. In fact, [the Alaska Cruise Association] invested funds based on the findings of the scientific panel and decisions by the legislature. The industry has invested over \$200 million to place the best available technology on the ships. This summer the industry worked closely with DEC and EPA on further scientific testing in Skagway Harbor. Furthermore, [the Alaska Cruise Association] is working with DEC on the technology conference to be held tomorrow. He noted that virtually all of the [cruise] lines

will be represented at the conference. He emphasized that it's inappropriate to have standards based on junk science. Mr. Binkley, again, encouraged the committee to move HB 134 forward as it simply allows DEC to do its job.

CO-CHAIR HERRON closed public testimony with the exception of allowing those who've testified to respond to questions from the committee members.

[9:30:30 AM](#)

REPRESENTATIVE GARDNER requested comment regarding Ms. Gibbins' testimony that Alaska received its first warning on fish consumption in the state. She also requested comment regarding Ms. Gibbins' earlier comment that the industry hasn't done anything in order to comply with the initiative.

MS. TOMICH KENT answered that although she is not the director in charge of fish advisory, there was one fish consumption alert issued for large flat white fish. She recalled that the contaminant was mercury. She offered to obtain the specific information on the warning for the committee. Regarding what the industry has done [since the passage of the initiative]; Ms. Tomich Kent explained that since a compliance schedule was placed in the permit, the regulations on compliance specify the need to do some things along the way. Therefore, the industry was asked to submit a source reduction evaluation and plan to DEC. The aforementioned required the cruise industry to review the potential sources of the four contaminants of concern. The companies covered under the permit have submitted the aforementioned plans to the department. The companies are also required to provide the department with an annual progress report on source reduction as well as new technologies should the companies find that source reduction isn't sufficient to meet the water quality standards at the end of the pipe.

[9:33:13 AM](#)

REPRESENTATIVE GARDNER asked whether Ms. Tomich Kent would feel comfortable in saying that the cruise industry has made a good faith effort to comply to date.

MS. TOMICH KENT said that it's been a mixed response as some cruise lines have done more than others.

[9:33:45 AM](#)

REPRESENTATIVE HARRIS asked whether there is anything in HB 134 that decreases DEC's ability to monitor, assess, and evaluate the quality of the discharge at the pipe.

MS. TOMICH KENT answered that nothing in HB 134 prohibits DEC's ability to establish protective permits, monitor compliance with those permits, and nothing would change the department's approach to technology. She clarified that cruise ships would be required to use the best available technology and DEC would be required to review that every year when it reviews the permit. Furthermore, DEC would maintain existing tools used with permittees to ensure the protection of water quality and aquatic life. In further response to Representative Harris, Mr. Tomich Kent confirmed that HB 134 doesn't contain anything that should "scare" Alaskans regarding water quality.

[9:35:18 AM](#)

REPRESENTATIVE MILLETT asked whether existing land-based technologies are in use in Alaska.

MS. TOMICH KENT said that she wasn't sure whether they're used on the shore-based facilities in Alaska. She mentioned that perhaps a few small packaging plants may use the reverse osmosis. In further response to Representative Millett, Ms. Tomich Kent related that almost all of the permits issued for the wastewater discharges from the community systems in Alaska rely upon mixing zones to achieve water quality standards.

REPRESENTATIVE MILLETT inquired as to the mixing zone measurement for municipalities and other areas.

MS. TOMICH KENT explained that it varies from community to community. Each community is reviewed on a site specific basis and the volumes, concentrations, and flushing are reviewed for each facility.

[9:36:28 AM](#)

REPRESENTATIVE CISSNA expressed interest in hearing about the science that was used for the original initiative.

[9:37:36 AM](#)

CO-CHAIR MUNOZ recalled earlier testimony that cruise lines employ advanced water discharge systems that produce a high quality effluent and there isn't the technology available today

to achieve the standards proposed in the initiative. She asked if that's indeed the case.

MS. TOMICH KENT said that the advanced wastewater treatment systems were designed primarily to treat fecal coliform. Although these advanced wastewater treatment systems are very effective at treating fecal coliform, they are less effective at treating the ammonia and metals that are being targeted today. In further response to Co-Chair Munoz, Ms. Tomich Kent said there are technologies that have been used in a laboratory and in shore-based facilities, but haven't yet been sized, designed, constructed, installed, and operated within the confined space of a cruise ship.

[9:39:06 AM](#)

REPRESENTATIVE KELLER pointed out that the feasibility study from Oasis Environmental says that the available land-based technologies "appear to be able to treat" and "it's possible" [to treat the pollutants]. He pointed out that the feasibility study also says that using reverse osmosis "may be the solution that works". However, some of the testimony seems to imply that the science and technology to achieve [the standards in the regulations] is available.

[9:40:15 AM](#)

REPRESENTATIVE CISSNA inquired as to what incentives are available for this technology. She further inquired as to why technology hasn't been applied, if it does exist.

MS. TOMICH KENT opined that the development of wastewater technology takes time, and it also takes time to adapt it to various applications. For example, in a laboratory clean water can be produced from almost any contaminated water. However, implementing the aforementioned in a very confined space such as a cruise ship would be difficult. She related her belief that there are incentives for cruise ship companies and others to continue to improve wastewater treatment technology.

[9:42:04 AM](#)

CO-CHAIR MUNOZ moved to report the proposed CS for HB 134, Version 26-LS0570\E, Bullard, 2/16/09, out of committee with individual recommendations and the accompanying zero fiscal note.

REPRESENTATIVE CISSNA objected.

[9:42:31 AM](#)

REPRESENTATIVE CISSNA offered her understanding that although the cruise ship industry is under pressure in relation to the upcoming season, there's no hurry when one takes into consideration the importance of the waters of Alaska. She expressed the need for the legislature to take time to ensure that all the information is gathered and [the legislature] is truly responsible. Representative Cissna urged the committee to hold HB 134 in order to obtain more information.

REPRESENTATIVE GARDNER said she has similar concerns, although she said she may vote in favor of HB 134 when it's before the full body. She expressed interest in hearing the results of tomorrow's conference, and opined that it's appropriate to wait to hear the results.

[9:44:43 AM](#)

REPRESENTATIVE HARRIS opined that nothing that comes out of that conference will change the intent of HB 134 because any technology available can and should be implemented if it's beneficial to the environment and the overall operations of the cruise ships in the state. He clarified that HB 134 does provide DEC the ability to do its job, which the original initiative should've achieved. Representative Harris urged passage of HB 134.

[9:45:44 AM](#)

A roll call vote was taken. Representatives Keller, Millett, Harris, Herron, and Munoz voted in favor of reporting the proposed CS for HB 134, Version 26-LS0570\E, Bullard, 2/16/09, out of committee. Representatives Cissna and Gardner voted against it. Therefore, CSHB 134(CRA) was reported out of the House Community and Regional Affairs Standing Committee by a vote of 5-2.

[9:46:15 AM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House Community and Regional Affairs Standing Committee meeting was adjourned at 9:46 a.m.