The St. Lawrence Island communities of Gambell and Savoonga are participating in a five-year research partnership with ACAT to assess and prevent exposures to endocrine-disrupting chemicals (EDCs). The project is supported by a grant from the National Institute of Health Sciences (NIEHS). Over the next several months, the research team will sample household dust, traditional foods and surface water for the presence of EDCs.

The leadership of Savoonga and Gambell fully support the “Protecting Future Generations” project and are working closely with ACAT because it is important for our communities to understand and minimize our exposures to potentially harmful contaminants. This research project is also a collaboration with the University of Alaska Anchorage (Drs. Frank von Hippel and Loren Buck) and University at Albany School of Public Health’s Institute for Health and the Environment (Dr. David Carpenter).

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Reflections on science and democracy
By Pamela K. Miller, Executive Director

The legislative session is in full swing in Juneau and I have to say, “it ain’t pretty.” The week of February 18, the Senate voted to weaken wastewater discharge standards for cruise ships, an action that reverses the will of the people as expressed through the successful 2006 Alaska citizens’ initiative. The Senate’s action represents a vote against clean coastal waters, the health of our salmon fisheries, subsistence resources, and food security. Despite testimony from fishermen, Native leaders, scientists, and other Alaska citizens who were overwhelmingly opposed to the weakening of discharge standards, the cruise ship wastewater bill (HB 80), passed both the House and Senate of the legislature. The bill is likely to be signed by Governor Parnell since it originated from his office and passed with no amendments. Members of the Senate who stood up for Alaskans and clean water in opposing HB 80 were Senators Johnny Ellis, Hollis French, Berta Gardner, Donny Olson, and Bill Wielechowski. We should thank them for their efforts and for offering constructive amendments that were ultimately defeated by the majority. If your Senator is not among those listed here, please ask them why they voted to allow the cruise ship industry to violate Alaska clean water standards.

Earlier in February, the Alaska Department of Environmental Conservation (ADEC) issued final regulations that eliminate the right of Alaskans to participate in decisions
The St. Lawrence Island Work Group was established to help guide this community-based research and includes representatives of the leadership of both communities, elders, and youth. Together, we are planning the research components and will soon begin the household dust and blood serum collection. ACAT and the St. Lawrence Island leadership and communities are pleased that the Alaska Area Institutional Review Board (IRB) recently approved these biomonitoring aspects of our community-based study.

Household dust accumulates chemicals that leach from consumer products as well as contamination tracked in on our shoes from outdoors. People can be exposed to these chemicals through inhalation of and contact with dust. We chose winter for the dust collection since our homes are more closed in during the winter months. St. Lawrence Island researchers will collect household dust samples from 48 homes, 32% of the households on SLI (24 in Gambell, 24 in Savoonga). Children are more vulnerable to exposures from household dust, so we will select households with children under the age of 12. The research team has designed questionnaires and will conduct interviews with the heads of households to obtain information on potential sources of exposure including the types/age of electronics, furniture and car-pets, use of household chemicals including cleaning products and pesticides, types/use of personal care products, and use of air filtration systems. One woman and one man between the ages of 18 and 35 from each participating household will also be included in the human bio-monitoring component of this study to assess any links between indoor exposures and the levels of contaminants found in their blood.

The SLI research team will collect traditional food samples during the upcoming spring hunt. The marine mammals collected will be tested for endocrine disrupting chemicals, including perfluorinated chemicals (PFCs) (used in stain resistant cookware and fabrics) and polybrominated diphenyl ethers (PBDEs) (used in furniture and electronics). These EDCs end up in the Arctic and are building up on our lands, in our neqepik (traditional foods) and in our bodies, where they disproportionately affect the health and well-being of our Yupik people. Finally, in the summer, the team will collect and test surface waters through the collection of stickleback fish that serve as an indicator species.

The SLI research team will report the results of this community-based participatory research to the leadership and communities so that they can make their own informed decisions with the data. Our SLI leaders work pro-actively on chemical policy reform at the international, national and state-wide levels to eliminate sources of local and global contaminants in order to protect the health and well-being of our Yupik people, children, and future generations.

Igamsiqayugyiikamsi! (Thank you)
Our green cleaning service is growing! We use research-verified non-toxic cleaning products to decrease your exposure to harmful chemicals. Call (907) 222-7714 or email antonio@akaction.org for more information or to sign up for a free estimate for your Anchorage home or office.

Testimonial:

Our office was blown away by how professional, friendly and thorough the staff (and Antonio) of ACAT is with cleaning our office. Antonio was quick to respond with an inquiry of their services and when they came in person to view the office, they explained in detail the services ACAT provides.

It leaves us with peace of mind knowing that the cleaning products they use are all natural which is beneficial in an office setting when people are visiting the office and may have unknown allergens – such as chemicals from cleaning supplies. ACAT has the friendliest staff and they really do a great job. We are definitely satisfied with the work they do. Thank you ACAT!

-Renewable Resources, Anchorage, Alaska

ACAT Staff changes

Maricarmen Cruz-Guilloty, Environmental Health & Justice Policy Coordinator

Maricarmen is a bilingual Puerto Rican whose love for Alaska wild salmon and interest in supporting environmental justice for Alaska Native Peoples first brought her to Alaska and then to ACAT. Maricarmen earned a Juris Doctor and a Masters of Environmental Law and Policy degree from Vermont Law School in 2012. Welcome, Maricarmen!

Karla Hart, Legislative Organizer

ACAT is pleased to welcome Karla to work with us during the 2013 Legislative Session. Karla is a lifelong Alaskan from Juneau. She has worked for the Alaska Legislature as an aide, researcher, and floor staff and has also served as a legislative reporter in Juneau.

Samantha Englishoe

We offer our fond and very best wishes to Samantha Englishoe, Environmental Health and Justice Policy Coordinator, who is leaving to teach in Nepal and will then pursue graduate studies. Samantha helped lead our efforts in support of state and federal chemicals policy reform, organized lecture series and many other public educational workshops and events. We all feel fortunate to have had the opportunity to work with Samantha and impressed with her eloquence, grace, humor, and organizing skills. Thank you, Samantha!

Call on our Green Clean Team for spring cleaning!

ACAT’s Green Clean Team (from left to right): Antonio Huaiquivil, Matthew Eidem and Yussuf Hassan Arte.

ACAT’s Green Clean Team for spring cleaning!

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-Renewable Resources, Anchorage, Alaska

ACAT’s garden wish list

Help support our work to encourage local, organic food! ACAT is looking for greenhouses, cold-frames, and sunny garden spaces to grow organic starts for the Anchorage Farmer’s Market and our garden at the “C” Street Community Gardens. Do you have extra gardening space? Please contact ACAT to talk with us about how we might share space in your greenhouse, cold-frame, or yard. Also on our wish list is a donated truck!

Email: garden@akaction.org

CHE-AK Call, March 6, 9:00 am Environmental Exposures & Autism

Free one-hour teleconference with Martha Herbert MD, PhD, of Harvard Medical School and Maureen Swanson of the Learning Disabilities Association of America (LDA). Learn more and sign-up at http://bit.ly/March6Call

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The law that polluted the world: Why you should care about California’s flammability rule

If you’ve purchased home furniture or baby products, you’ve probably seen the label pictured at right. California Technical Bulletin 117 (TB 117), adopted back in the mid 1970s, mandates that foam used in furniture cushions must withstand a 12-second exposure to a small, open flame. Because California is such a large market for furniture, TB 117 has become the de facto fire safety standard for manufacturers throughout the United States and in the global market. Joe Digangi, Science Advisor to the International POPs Elimination Network (IPEN), called TB 117 “the law that polluted the world.”

To comply with California’s flammability rule, furniture manufacturers have been adding high levels of toxic or untested brominated or chlorinated chemicals to the foam. These chemicals do not prevent fires as promised; they just slow the spread of flames. In addition to their questionable fire-safety benefits, exposure to flame retardant chemicals has been linked to serious health effects including neurological impairment, infertility, hormone disruption and cancer.

Flame retardant chemicals migrate out of furniture and other products into dust and are ingested by humans, pets and wildlife. The chemicals are widespread in the environment and are accumulating in the Arctic. Women of child-bearing age in the Yukon-Kuskokwim region of Alaska have the highest levels of flame retardant chemicals of any human population in the circumpolar Arctic.

An update to California’s flammability standard called TB 117-2013 was released on February 8, 2013 under the direction of California Governor Jerry Brown and takes a commonsense approach to protecting public health and safety by addressing how and where fires start. The updated rule will eliminate the open-flame test and instead require a smolder test on fabric that reflects real-life fire scenarios. Manufacturers could meet this standard without flame retardants while still preventing fires.

Alaska Community Action on Toxics has been a leader in the campaign for effective fire safety without harmful flame retardant chemicals, through education, advocacy, supporting legislative measures in Alaska and working to reform national and international chemicals policy.

Today, we are asking you to voice strong support for TB 117-2013, California’s proposal to update the flammability standard for increased fire safety without relying on toxic chemicals. A change in California state law can lead the nation in the right direction. After all, California’s flammability rule led to increased and widespread use of flame retardant chemicals, through education, research and regulation.

The major flame retardant chemicals used in foam to meet TB 117 have been associated with adverse health effects:

- **PentaBDE** has been linked to decreased fertility, hormone disruption, lowered IQ and hyperactivity in humans. In animal studies, this chemical causes reproductive, thyroid, hormonal, developmental and neurological disorders. It is one of 21 chemicals globally banned by the Stockholm Convention on Persistent Organic Pollutants, signed by 177 countries.

- **Chlorinated Tris or TDCPP** was voluntarily removed from children’s sleepwear in the 1970s because it changed DNA. It was listed as a carcinogen under California’s Proposition 65 in 2011.

- **Firemaster 550** contains four flame retardant ingredients which are known to be toxic or lack adequate toxicity information. A pilot study links low level exposures to obesity and anxiety in animals.

- **Halogen-free replacements** for banned flame retardants are also not proven safe. Some halogen-free alternatives show neurotoxicity and ecotoxicity while others have little information available.

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“Scientific studies have long recognized that our current safety standard has been ineffective at preventing fires. Meanwhile, the chemicals used to meet the standard make their way into household dust, our food supply, soil, rivers and oceans, posing harm to children, pregnant mothers, families, firefighters and even pets and wildlife. I am pleased to support the Administration’s efforts to adopt an updated standard that ensures fire safety while reducing these threats to human health and our environment.”

- California State Senator Mark Leno

www.akaction.org
FAQs: Flame Retardant Chemicals

Where are they found?
Flame retardant chemicals can be found in furniture foam, automobiles, electronics, home drapes, nursing pillows, sleep positioners for babies, nap mats, tents, Christmas lights and other products. Because they are widespread in the environment, these chemicals are also in our air, water, soils, and foods.

How are we exposed?
Flame retardant chemicals migrate out of products into dust. Exposure is primarily through ingestion of contaminated household dust. Children receive higher exposure than adults. A mother can pass these chemicals on to her child in the womb and during infancy through breast milk. (Please note - health benefits do make breastfeeding a healthier choice than formula). Babies and toddlers are particularly vulnerable to exposure because of their frequent hand to mouth behavior.

Why is exposure harmful?
Mounting scientific evidence points to an array of potential health effects linked to exposure including neurological impairment, infertility, hormone disruption and cancer (see box on page 4 for more on health effects).

How can I protect myself from exposure?
- Wash hands frequently
- Clean with a damp cloth and use a vacuum with a HEPA filter to avoid stirring up dust

What else can I do?
- Support California’s updated flammability standard TB 117-2013 (see article on page 4).
- Support legislation in Alaska to phase out the use of toxic flame retardants in household products. bit.ly/AKaction
- Support the Safe Chemicals Act to update the nation’s outdated chemicals policy to require that chemicals used in products are tested for safety before they are put on the market. bit.ly/AKaction

Flame retardants in Alaska:
- Naptime Nightmares? Toxic Flame Retardants found in Day Care Nap Mats in Anchorage & Nationwide bit.ly/NapMats
- Listen to the podcast of our CHE-AK call with Heather Stapleton, PhD about the Duke University couch study that tested couches across the U.S., including in Alaska, and found that the vast majority contained potentially toxic or untested flame retardants. bit.ly/Feb13Call

Children in Alaska are particularly vulnerable to exposure to flame retardants, especially families who eat traditional foods. Pictured here are Vi Waghijy’s granddaughter Tasha Cox (3 yrs) and Vi’s great nieces and nephew Brisais Madsen (3 yrs), Siberia Madsen (2 yrs) and Alyssa Madsen (9 yrs).
Unfortunately, Pebble Mine is not the only massive open-pit mine poised to devastate our rich stocks of wild salmon, and threaten ways of life in rural Alaska. Two foreign mining companies, Barrick Gold and NovaGold have joined forces for the proposed Donlin gold mine in Southwest Alaska. The proposed mine is along Donlin Creek, a tributary of the Kuskokwim River that enters the Kuskokwim about 120 miles upstream from Bethel. While smaller than the Pebble mine plan, the proposed Donlin gold project shares many of the same environmental concerns including mercury and cyanide contamination, acid mine drainage, and disruption of subsistence resources.

The main features of the project are an open pit 2.2 miles long by one mile wide, a tailings pond restrained by a 475 foot tall dam, and 2 billion tons of waste rock. In addition to the 25 square miles of mine operations, the plan calls for a 313-mile natural gas pipeline from Cook Inlet to the mine, and 30 miles of road from the mine to a barge landing to be built on the Kuskokwim River. Daily barges up the Kuskokwim would bring fuel and supplies to the mine, and export tons of ore concentrate and waste mercury.

Health concerns of Donlin include contamination from acid mine drainage (AMD), cyanide (used to separate gold from rock), mercury, arsenic and other heavy metals. Acid mine drainage occurs when sulfur-containing rocks react with oxygen and water to make sulfuric acid, which causes erosion that exposes more sulphur, which produces more acid. Once AMD starts, the mine requires expensive mitigation and water treatment “in perpetuity.” Erosion also leaches arsenic, selenium, antimony, lead, cadmium, and mercury out of the tailings and waste rock piles and into downstream fish and wildlife habitat.

Cyanide is added to the ore during heap leaching to help separate out the gold from the rock. Cyanide is acutely toxic; a small drop kills. Cyanide is recaptured and re-used, but if a leak or spill were to occur it would wipe out aquatic life for miles downstream. Mercury co-occurs with gold, and comes to the surface as part of the ore. The thermal processing that separates gold from rock releases gaseous mercury into the atmosphere, Donlin would be subject to recent (2010) EPA limits on mercury emissions, so some mercury would be recaptured for disposal, but 30-60 tons of mercury could still legally be released each year.

Concerned yet? Act now!

The website www.donlingoldeis.com has information on the permitting process and a schedule of public meetings. Scoping comments will be accepted on the website until March 29, 2013. Now is our chance to tell the U.S. Army Corps of Engineers what issues and concerns should be addressed in the preliminary studies. Stay tuned for ACAT action alerts!

ACAT took the lead for several organizations in preparing detailed comments on the draft pesticide regulations (bit.ly/ACATnews). An ADEC spokesperson told me that the regulations were based on “sound science” and she was quoted in an Anchorage Press article stating: “I want people to focus on the fact that these pesticides go through a very rigorous process.” These statements are not supported by the facts:

- According to the 2010 Report of the President’s Cancer Panel: “Registered pesticides contain nearly 900 active ingredients, many of which are toxic. Many of the inert ingredients in pesticides also are
Reflections, continued from page 6

toxic, but are not required to be tested for causing chronic diseases such as cancer.”

The report also states that “Approximately 40 chemicals classified by the International Agency for Research on Cancer as known, probable, or possible human carcinogens, are used in EPA-registered pesticides now on the market.”

• According to Schettler et. al in “Generations At Risk”: “Toxicity testing for many pesticides that have been in use for many years is inadequate. One source estimates that complete toxicological data are available for only about 100 of the six hundred active pesticide ingredients. Reproductive and developmental toxicity data are often particularly deficient.”

We need to pay attention and take action to protect our rights to clean air, clean water, and toxic-free food.

The cruise ship wastewater bill and pesticide regulations are just two examples of how the Parnell Administration and the legislature are attempting to diminish our rights, acting in the interest of corporations rather than the people of Alaska. These actions threaten public health. Legislators and administrative officials are justifying their decisions in the name of “sound science,” but their decisions are not supported by evidence from the peer-reviewed scientific literature. The Center for Media and Democracy notes that “sound science is a phrase often used by corporate public relations and government agency spokesmen to describe the scientific research used to justify a claim or position… Lack of ‘sound science’ is a common critique used against public health and consumer activists in an attempt to discredit their concerns about public safety and environmental risk.”

In the meantime, Alaska Community Action on Toxics is working hard to support good science and a strong democracy. Our community-based research on St. Lawrence Island and our work in Seward to train people in a citizen air monitoring program to understand the effects of coal dust on public health are examples of our science and environmental justice leadership. ACAT offers monthly teleconference seminars as part of the Alaska Collaborative on Health and the Environment (CHE-Alaska) featuring eminent scientists and policy makers. We offer workshops on alternatives to the use of harmful chemicals in our homes and organic gardening. We are also making progress in advancing chemical policies to protect our health and environment.

We need to pay attention and take action to protect our rights to clean air, clean water, and toxic-free food. I think about the lines from a Graham Nash song, Man in the Mirror: “Make sure that the things you do keep us alive.” Let’s work on this together! Please engage with us in actions that support the health of our communities. I hope you’ll sign up to receive our action alerts, notices about workshops, and public lecture series. Thank you for your encouragement and support!

Double your dollars when you donate to ACAT!

Right now your donation to ACAT will go twice as far. Groundswell’s Catalyst Fund will match your tax deductible contribution dollar-for-dollar. Donate online at www.akaction.org. Your donation in any amount is eligible for the match. Donate $35.00 or more to become a supporting member. Counting you as a member makes our voice that much stronger. Thank you!

Yes! I want to support Alaska Community Action on Toxics (ACAT)

Name: _____________________________________________ 
Organization/ Business: ____________________________ 
Address: __________________________________________ 
City/ State/ Zip: _________________________________ 
Email Address: ____________________________________ 

Enclosed is my gift of:  
☐ $500  ☐ $250  ☐ $100  ☐ $50  ☐ $35  ☐ $25  $______Other

Alaska Community Action on Toxics is a 501(c)(3) nonprofit organization and all contributions are tax deductible to the extent allowed by law.
Save the date!
May 22, 7:00 - 9:00 pm
Kincaid Park Chalet, Anchorage

Wild and Organic Edibles, An Event to Celebrate the Legacy of Rachel Carson

Everywhere you look in spring there are plants that can be used for food or medicine - edible roots, shoots, leaves, buds, and flowers. Join Alaskan experts for a plant walk and learn to identify the wild bounty in our backyard. This ACAT fundraising event includes a nature walk and a delicious wild edibles dinner. $50 per/person. Presented with Ellen Vande Visse, Saskia Esslinger, Doug Tryck and GeorgeAnne Sprinkle. Please join us! Sign up at bit.ly/Donate2ACAT

Alaska Community Action on Toxics stood in solidarity with the people of St. Lawrence Island, first Peoples of Canada and the Idle No More movement at a rally in Anchorage on January 11th. Alaskan Native leaders from across the state spoke about issues they face on their traditional lands. Anchorage residents from St. Lawrence Island hold purple crosses for family and friends lost to cancer. Left to right: Marin Green, Debbie Pungowiyi, Vi Waghiyi, Elaine Kingeekuk, and Verner Wilson III. Photo provided by Verner Wilson III.