

Yakutat Tlingit Tribe Natural Resource Program



To preserve, maintain and protect the unique culture, land and resources of Yak-tat Tlingit people.
To maximize our social, health & well-being while creating economic development benefits to all tribal members.



Community Air Quality Project



Partners: **State of Alaska-DEC, Alaska Native Tribal Consortium and the City and Borough of Yakutat.**

When Mansel Nelson, from the Institute for Tribal Environmental Professionals (ITEP) came to Yakutat, to conduct an indoor Air quality Assessment walk thru, for our 3 school facilities and to provide an AQ information media booth for the health fair, one of his recommendation to us was to contact Alaska Native Tribal Consortium, (ANTHC) and/or the Alaska Department of Environmental Conservation(ADEC), Air Quality Division, to assist us in solving our smoke inversion issue, that surrounded the school. We started with a grant from ANTHC to conduct an (AQ) monitoring study to pin point where the smoke was coming from. ANTHC assisted us with writing a Qapp, and providing dust track monitor training, for staff and our AmeriCorps volunteer Yvonne Baker.

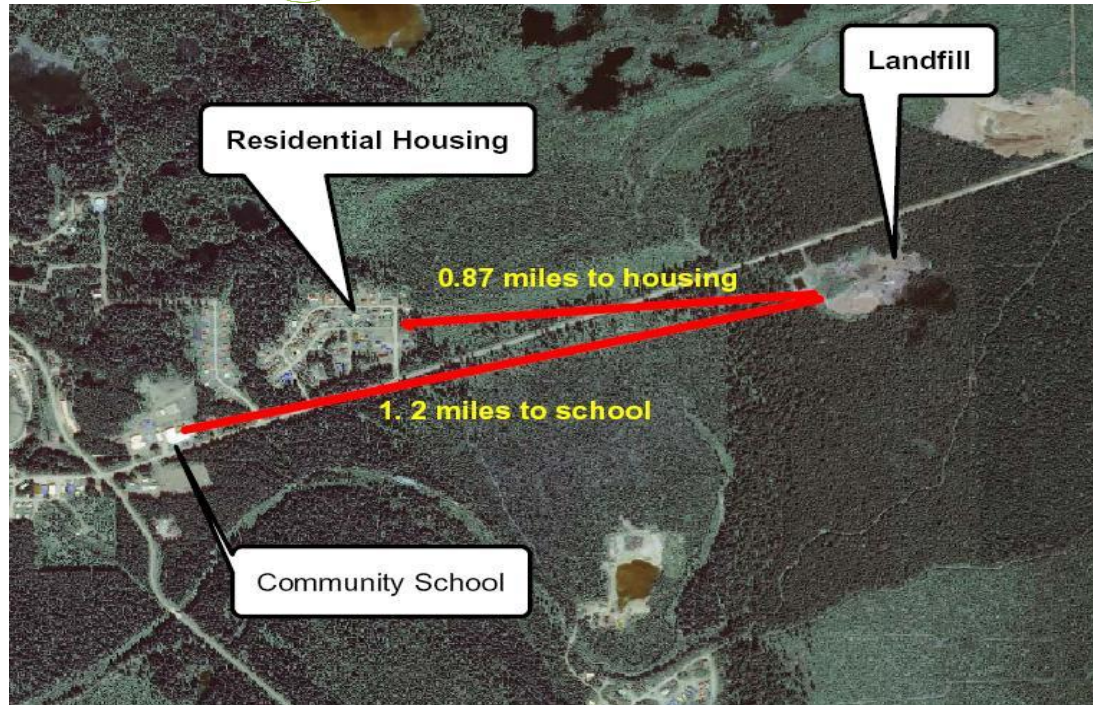


Smoke Inversions at the school





Solving an issue:



The fall/winter inversions are located in the low area on the highway and in the areas of the schools

We assumed all the smoke was coming from the Land fill, the ANTHC dust track monitoring project helped us to discover that the wood stove smoke from several subdivision played a much bigger part in the smoke inversions. The city worked with us and modified their burning times at intervals, for us so we were able to get a complete picture of the smoke origin.



Landfill then:



*Yakutat was once
the state's
example of
"a worst dump"*

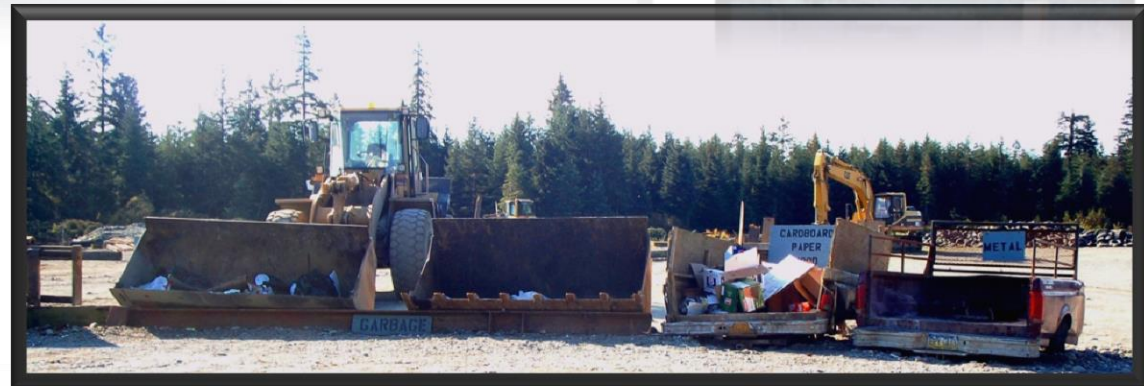
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Landfill now:

Staffed with Ralo trained employees
and Organized with good Signage



And now: is a Certified Landfill



Success Story-Yakutat Landfill

Gunalchéesh, Gunalchéesh

Baby steps and community team work!

We received a copy of this email that shows how committed the community of Yakutat is, when it comes to taking care of this land-

To: Ron Beattie; manager@yakutatak.us

From: Sandra Woods , Alaska Department of Environmental Conservation

Subject: Congratulations to Yakutat

Your landfill is now permitted by ADEC Solid Waste program. Congratulations to you and your community. I'm enclosing an electronic copy of your permit for your files and a hard copy is being mailed to you today. Please contact me if you have any questions or comments. Thanks again for your work in getting this accomplished. This is the first time that Yakutat has ever had a solid waste permit.

To: Yakutat Tribal Council, Victoria Demmert Tribal President

From: Natural Resources Program

Program Manager Bertrand Adams Jr, Good news! Please share this on to the Ytt council, with a “please note” that, we played a major part in achieving this, starting with previous EPA Tribal Environmental Directors starting in 2002 with Richard Porter, Bertrand Adams Jr, Violet Sensmeier, Yvonne Baker and Mary Porter who made it a priority, from requesting funds to purchase the facility, connex’s and landfill equipment. Gunalchéesh, to the Solid Waste committee Kris Widdows, Debbie Caron, Lee Benson, Yvonne Demmert and Mary Porter who received the reins and helped the community keep it at the fore front every year, also Gunalchéesh, to the current City and Borough administrators and their staff out at the landfill, especially Aaron Gray & Sonny Lewis, who made the touch down!! Baby steps and Community Team work made it happen.



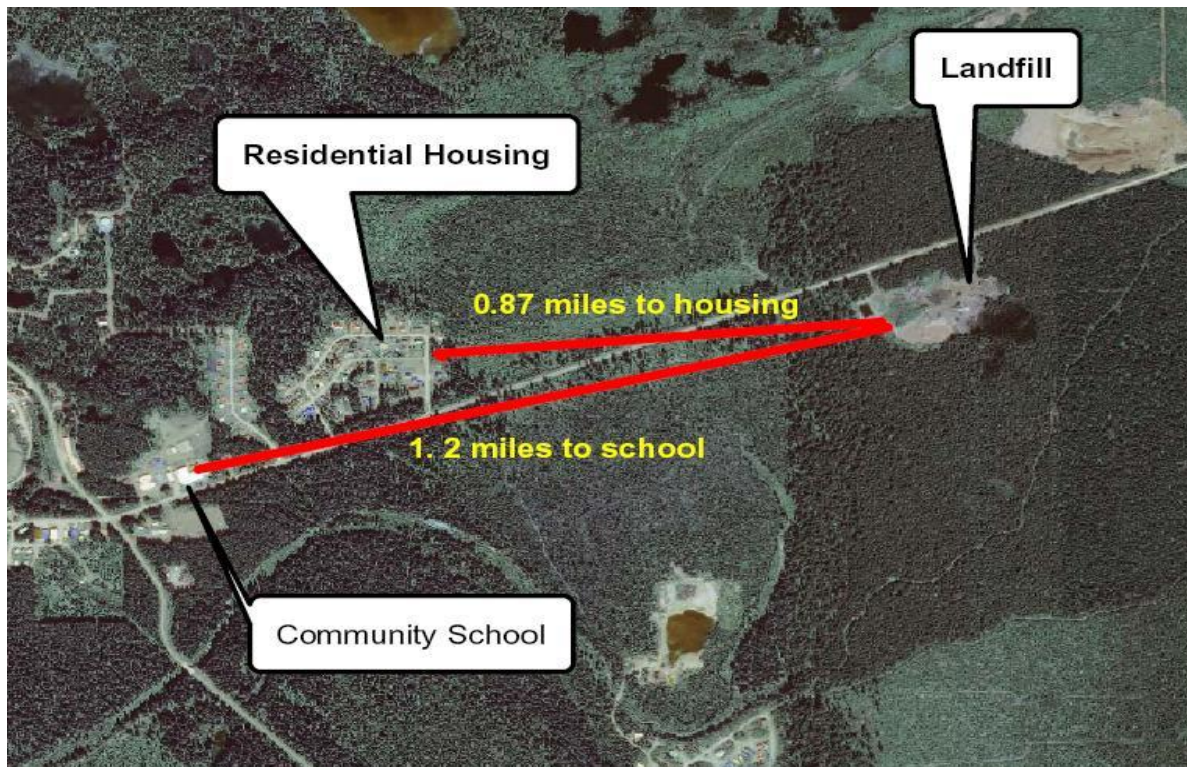
Staying on it every year!



1. Asked ADEC for assistance in monitoring smoke levels. Just so happens they had several monitors freed up by another project.
2. Applied for and granted an ANTHC mini grant phase 1 to start monitoring the area around the corridor of inversion and to start a community wide wood stove use assessment
3. ANTHC/EPA approved our Qapp. AmeriCorps volunteer and staff were trained to conduct the monitoring with Model 8532 Dust Track II Aerosol monitors.
4. Worked with city of Yakutat landfill operators to coordinate burning times in intervals during prevailing winds.
5. Surprising result showed that the majority of the smoke came from the two subdivisions near the corridor, during cold spells, as well as the commercial furnace across the street. There are commercial wood furnaces in both subdivisions.



Prevailing wind direction in red

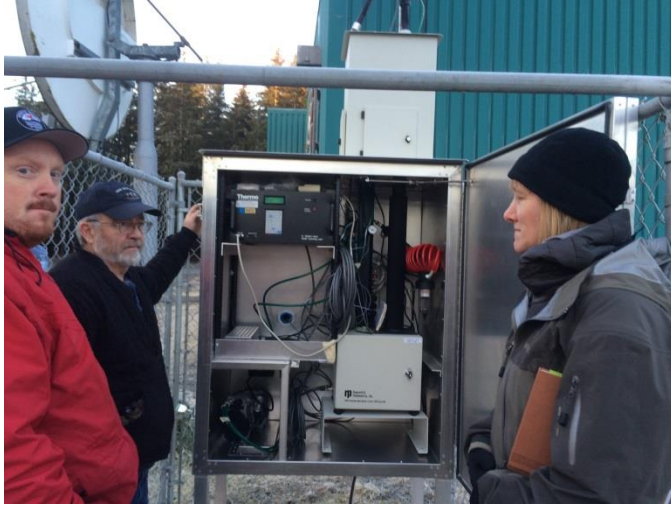


The location of Winter/fall inversions, are on the highway, and in school area

ANTHC, Chris Fish came in to help us identified sites for the dust track and trained staff how to conduct the monitoring.



Baseline monitoring

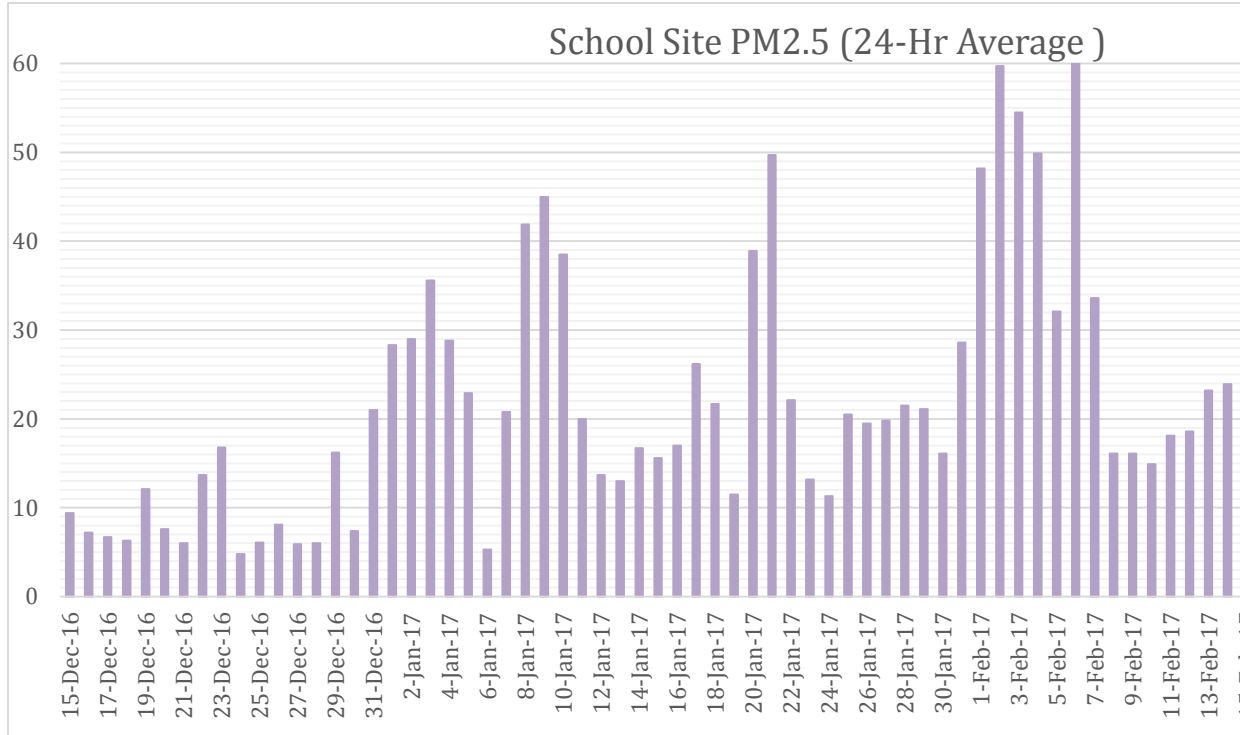


ADEC -Michael Gravier, Barbara Trost and YTT-Matt Anderstrom (on ladder) installing an air monitor next to the Yakutat Elementary school.

Report from ADEC's first year testing "The School Site was selected due to concerns expressed by the local community about the air quality at the school since all the children in the village attend classes there. The school is in close proximity to local subdivisions where the primary source of home heating is wood." In addition, the school is located in the path of the prevailing winds just 1.2 miles east of the burning landfill."



Analyzing data:



Categories	Cautionary Statements	24 Hour Particulate Levels
Good	None	0.0 to 12.4
Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion.	12.5 to 35.4
Unhealthy for Sensitive Groups	People with respiratory or heart disease, the elderly and children should limit prolonged exertion.	35.5 to 55.4
Unhealthy	People with respiratory or heart disease, the elderly and children should avoid prolonged exertion; everyone else should limit prolonged exertion.	55.5 to 150.4
Very Unhealthy	People with respiratory or heart disease, the elderly and children should avoid any outdoor activity; everyone else should avoid prolonged exertion.	150.5 to 250.4
Hazardous	Everyone should avoid any outdoor exertion; people with respiratory or heart disease, the elderly and children should remain indoors.	250.5 to 500

Data and categories chart are sent to the school and will be putting in news paper. Thanks to ADEC for their last year of Data and their technician Matt Stichick. Their current data will support what ever project we take on from here.



Next steps:



1. Applied for other mini Grants from ANTHC to hire a technician to conduct and compile A Wood Heating Assessments for phase 2.
2. Submitted another community wide assessment Qapp targeting the wood stove users.
3. ANTHC/EPA approved our Wood Use Assessment Qapp.
5. Data will be used to plan and design Media educational campaign for the correct wood stove use and how to reduce wood smoke and to apply for funding to address issues found on the assessments.



Assessments Issues we might have to address in the future:



1. How many EPA Certified wood stove out there. (wood stove replacement program)
2. Conditions of stoves- (maintenance programs of sorts)
Fire bricks & ropes
Importance of Clean Chimneys
3. Stove users knowledge of how to burn wood correctly?
Type of wood burned (develop/find media to educate)
Wood storage conditions (possible building of wood storage units)
4. Other locations of smoke inversions in the village.



Gunalchéesh ho ho, (thank you very much) to our partners who hung in there to assist us with our Smoke Inversions. Yakutat Tlingit Tribe



1. Alaska Native Tribal Consortium: Environmental Group Program (ANTHC)
2. Alaska Department of Environmental Conservation (ADEC)
3. City and Borough of Yakutat, administration, school, landfill operators
4. Institute for Tribal Environmental Professionals. (ITEP)
5. And especially the Environmental Protection Agency-Indian General Assistance Program (IGAP) for their guidance in assisting us with all imminent environmental issues, Air, Land and Sea. And for assisting us: *To start Brownsfield, Nalemp, & Fuds. To address- Indoor Air Issues, River base line studies, transboundary issues on our wetlands. Ocean monitoring of Harmful Algae Blooms, Environmental Education outreach this and much more! Quyaana*

