

# NEN' EL TUU

The CVTC Tribal Response Program Newsletter

Nahluude (Fall) 2024

Volume 7 | Issue 1



Photo Credit: Richard Chiolerio

## NTS'E BA HNIYAES?

### WHAT ARE YOU TALKING ABOUT?

- Bede Nt'aennen? *Who is this?*  
A 90-second Interview: Cody Henrikson
- Slick the Oil Spot Takes on Lead
- Testing for Lead at Home
- Hnats'et'aen: We are playing.
  - Nakosu! - Let's clean up!
  - Maze Fun
  - Fill in the Blanks
  - Color Time
- Sources of Lead in Alaska
- Expanding the Spectrum of Brownfields
- Prevent Lead Exposure
- Slaaghe dela dezenda? Can you help?



nat'aan'delaeyi

*autumn wind*

*lit. "that which brings leaves down"*

# BEDE NT'AENEN? WHO IS THIS?

(a 90-second interview)

1. What's your name?

Cody Alden Henrikson

2. What's your job?

Fisheries Technician II

3. Do you have a favorite spot in Alaska?

There are so many amazing places in Alaska but one of my favorites is the Kenai Peninsula.

4. How long have you been working in your position/field?

I have been working for CVTC since June 2024.

5. What's something you wish the general public knew about your job?

I wish more people knew about the restoration work CVTC has been apart of including restorations of Moose Creek to bring back salmon habitat.

6. Most routine part of your job?

Emails and paperwork

7. Weirdest/Wildest thing you witnessed while working?

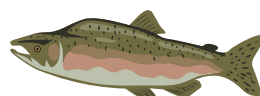
I saw some amazing culturally modified trees this season near [B]onnie [L]ake.

8. Favorite animal?

I feel like as a fishery technician I have to say salmon.

9. Seasonal Question: Would you rather enjoy a crisp walk through a forest of colorful leaves, or relax with a warm blanket and a good book?

I would always opt to go outside.



## Testing for Lead at Home

You might be wondering: can I just use a lead test kit from a paint store? Kits for testing paint and ceramics are available at most paint and hardware stores for \$8 - 10. They have chemicals that change color when rubbed against a surface that contains lead. Keep in mind:

- These kits can only tell you if there is lead in the paint you tested.
- They will not tell you how much lead is in the paint or if it is a hazard.
- You can not use them to test for lead in soil.

If you decide to use a lead test kit to test your paint, follow the directions on the package very carefully. Be sure to test the bottom layers of paint. To do this, use a sharp knife to cut a slanted notch through all the paint layers on the spot you want to test. Test all the layers of paint in the notch. Look for the color change indicated by the test kit.

If your house was built before 1978 and your lead test kit comes out negative (does not change color), you should have an accredited lab test the paint to make sure the lead test kit worked properly. Paint on structures built prior to 1978 is legally presumed to be lead-based, unless a state-certified Inspector/Assessor has quantitative testing to show otherwise.

Tsin'aen - Thank you



The previous excerpt was part of a larger article found at: California Department of Public Health - Childhood Lead

Poisoning Prevention Branch. (2023, February 24). Testing your home for lead.

California Department of Public Health. Retrieved November 13, 2024, from

[https://www.cdph.ca.gov/Programs/CCDPHP/DEOD/CLPPB/Pages/home\\_test.aspx](https://www.cdph.ca.gov/Programs/CCDPHP/DEOD/CLPPB/Pages/home_test.aspx)

# SLICK THE OIL SPOT

## TAKES ON LEAD:

## THE SNEAKY HEAVY METAL

Hey, eco-champions! It's your oily pal Slick, here to spill the facts on one of nature's sneakiest heavy metals: lead. You might not see it sneaking around on the playground, but trust me, this metal has a long history and a bad rep!

So, What's Lead? Lead is a dense, soft, bluish-gray metal with the element symbol Pb. Fun fact: Pb comes from the Latin word *plumbum* (like "plumbing"), which is where we get words like *plumber*—yup, because ancient pipes were made of lead! Unfortunately, some modern pipes still contain lead, and it's caused serious problems, like in Flint, Michigan, where lead-contaminated water created a major health crisis. It's a big reminder that lead in water pipes isn't just ancient history.

While it's naturally in the Earth, lead usually isn't hanging around by itself. Instead, you'll find it in minerals like galena, anglesite, and cerussite. These minerals are like lead's "squad"—they keep it mixed up with other elements like sulfur and oxygen. Lead also shows up in places we don't want it—like old paint, soil, water pipes, and even dust! Lead can also hide out in some items we might use every day, like fishing weights, hunting ammunition, and even some craft supplies. So, if you think you might have touched something with lead, it's best to wash your hands with warm water and soap. A quick wash can help keep lead particles from lingering on your skin.

Here's the scoop, folks: there's no "safe" amount of lead. Even a tiny bit can mess with brain cells, which can lead to learning problems, memory issues, and other health problems over time. That's why protecting ourselves from lead is so important! The best way to fight lead is by knowing where it lurks and how to keep it out of our bodies. We've got more lead awareness now than ever before, which means safer water, buildings, and lives!

Stay smart, stay safe, and keep an eye out for more eco-tricks from yours truly, -Slick



Art by Credit: Call Gormon



### IT'S NOT ALWAYS GREAT TO BE #1

Lead is considered a "recognized environmental contaminant" by the Environmental Protection Agency (EPA). That means "it is considered a hazardous substance that poses significant risks to human health and the environment, and is subject to regulations by the agency due to its potential for contamination in various media like air, soil, and water." Lead contamination can classify a site as a brownfield property. Between 2006 and 2018, lead was the #1 source of contamination on reported brownfield properties!





# EXPANDING THE SPECTRUM OF BROWNFIELDS:

## UNDERSTANDING NEW “-FIELD” TERMINOLOGY

In the world of land redevelopment, we often hear the term “brownfield,” which the U.S. Environmental Protection Agency (EPA) defines as “a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.” Now, as urban landscapes evolve, so has our vocabulary. Today, various “-field” terms describe different kinds of sites and the unique considerations that come with each. This expanded language helps communities, planners, and developers understand the distinct features and redevelopment needs of each type.

### Why This Matters



Each of these terms—brownfield, greenfield, grayfield, and more—helps capture a property’s unique potential or challenge. This language allows communities to better understand the specific actions, funding, or regulations needed to bring these areas back to life.

As a Tribal Response Program Coordinator, I’m encouraged to see this vocabulary expand. Clear language around different land statuses helps all of us involved in redevelopment communicate more effectively, helping us make the best possible use of lands within our communities and ensure they are safe, vibrant places for future generations.

### Core Terms



1. Brownfield: Traditional brownfields are typically abandoned industrial or commercial sites—like old factories or gas stations—that carry contamination risks. Environmental hazards like asbestos, lead-based paint, and contaminated soil or groundwater are common. However, it’s important to remember that this is a property status: any kind of property can be a brownfield.

Cleaning up brownfields can be costly and complex, but their redevelopment brings new life and growth to communities, making the investment worthwhile. Nowadays, in the changing landscape of land revitalization and real estate, “brownfield” is becoming an umbrella term to denote any land that might be or is contaminated.

2. Greenfield: A greenfield is undeveloped land, such as open countryside or grazing land, untouched by previous construction or industrial activity. Development here can reduce the strain on older, abandoned properties, but it also takes away natural landscapes, which may impact ecosystems.



### Core Terms, continued

3. Grayfield: Gray fields are vacant, developed areas without significant contamination concerns. Shopping malls, big-box stores, and empty parking lots often fit this category. With infrastructure already in place, grayfields can be more easily revitalized, especially with support from public initiatives to counter urban sprawl.

4. Bluefield: Bluefields refer to properties by water—such as rivers, lakes, or coastal areas—that were once vital for water-related activities like shipping, flood control, or fishing. Bluefields often have unique restoration requirements, and regulatory groups like the Army Corps of Engineers may be involved to protect water resources.

5. Brightfield/Windfield: Properties with contamination can sometimes be repurposed for renewable energy production. Bright fields and windfields use vacant land to produce clean energy through solar panels or wind turbines. These setups are beneficial because they bypass soil contact, making it possible to generate power without disturbing potentially contaminated ground.

### Newer & Emerging Terms

Now let’s dive into the other colorful terms that are being used!

1. Redfield: While some properties are considered brownfields due to suspected contamination, redfields are visibly contaminated sites, like old refineries. Because the need for remediation is clear, these sites are often heavily regulated, making redevelopment more challenging and sometimes less attractive to investors.

2. Blackfield: Blackfields are highly contaminated sites—often former mining or chemical processing locations—where toxins pose significant risks to human health and the environment. These sites typically require extensive cleanup and are usually the most difficult to repurpose due to the extreme level of contamination.



Image Credit: Meta AI

### Newer & Emerging Terms, continued

3. Whitefield: The concept of whitefield is less common and has been defined in specific contexts, particularly in Europe. Unlike contaminated brownfields, whitefields are prime real estate with no environmental hazards, located in desirable areas that the private sector eagerly redevelops. These properties do not need government assistance and offer high financial returns, making them very attractive for private investment.

4. Purplefield: “Purplefields” is an uncommon conceptual term that merges the idea of brownfields (previously used or contaminated land) with mixed-use development. It describes areas revitalized to support diverse land uses, like residential, commercial, and recreational spaces, all in a sustainable, integrated way. This approach aims to restore previously underused land while meeting varied community needs.

5. Goldfield: Sometimes, a property gains value due to outside influences, like a shift in consumer behavior or changes in city planning. These are termed “goldfields.” Initially regular brownfields, these sites experience a boost in market appeal, often due to factors such as new zoning laws, development incentives, or public interest in sustainable practices. An example might be an old industrial area transformed into a mixed-use hub with shops, apartments, and parks, sparking economic growth and revitalizing an entire region.

## Sources

The following articles were used to write the brownfields article. Many thanks to the respective authors!

- Hiegel, C. (2018, December 4). Let's talk about "Brownfield" and those other "fields"? LinkedIn. Retrieved October 31, 2024, from <https://www.linkedin.com/pulse/lets-talk-brownfield-those-other-fields-christina-hiegel/?trackingId=%2BbwfJRRsGsBzYfsPRuw%2BYQ%3D%3D>
- Tureckova, K. (2021). Specific types and categorizations of brownfields: Synthesis of individual approaches. *Geographia Technica*, 16(2), 29-39. Retrieved October 31, 2024, from [https://technicalgeography.org/pdf/2\\_2021/O3\\_tureckova.pdf](https://technicalgeography.org/pdf/2_2021/O3_tureckova.pdf)

## PREVENT LEAD EXPOSURE

In this issue we took a heavy look at a heavy metal: lead.

Now that you know about the problem, let's talk about how to keep yourself and your loved ones safe! The following information comes from a recent social media post:

Alaska Department of Health, 25 Oct 2024

(via Facebook) - Actions to Prevent Lead Exposure:

Lead can be found almost everywhere, so it's important to do your best to prevent lead exposure and absorption! Here's how you do it:

🍷 **Nutrition:** Eat foods high in iron, calcium, zinc, and vitamin C. Most subsistence foods are already high in these nutrients. Eating foods with these nutrients will reduce the amount of lead absorption in the body.

🧼 **Handwashing:** A lot of lead gets into our bodies through accidental ingestion. Frequent handwashing can help reduce lead intake, especially for babies who tend to put their hands in their mouths.

🧹 **Cleaning:** Lead dust has a habit of getting inside the house! Regular wet mopping or vacuuming can help reduce lead dust inside the home.

👟 **Shoes off policy:** Shoes are one likely way lead dust gets inside the home. Make a policy of taking off your shoes before entering your home to reduce lead dust.

Learn more here at: *Get the Lead Out*

(<https://health.alaska.gov/dph/epi/eph/pages/lead/leadfree.aspx>)



### YOU'RE GONNA WANT THAT

Lead is a neurotoxin: it attacks our nerves and brain.

**No amount** of lead in the body is considered safe by the Centers for Disease Control and Prevention (CDC). Even low levels of lead in blood affect brain development. Children under the age of six and developing fetuses are the most vulnerable to the effects of lead exposure. This is because their brains and bodies develop rapidly and young children may touch, mouth or eat objects contaminated with lead dust.

Photo Credit: Richard Chiolero



tsiic - yellow-orange color



### We All Make Mistakes: a Retraction

In my last issue, I accidentally mixed up the EPA's "Safer Choice" program with the Alaska "Green Star" program. The EPA Safer Choice program helps people find products that use safer chemicals, aiming to protect health and the environment across the U.S. The Alaska Green Star program works with businesses in Alaska to reduce waste and adopt environmentally friendly practices suited to the area's needs. I apologize for the mix-up! (Please contact me if you see that I've made a mistake!)



## SLAAGHE DELA DEZENDA? CAN YOU HELP?

Curious about the Tribal Response Program?

Wanna talk about brownfields or have me do a presentation?

Got an idea for an article you'd like to see? I'd love to hear from you!

Richard Chiolero

CVTC Tribal Response Program Coordinator

phone: 907.761.3908

email: [rechiolero@chickaloon-nsn.gov](mailto:rechiolero@chickaloon-nsn.gov)

website: <https://www.chickaloon-nsn.gov/tribal-response-program/>



"This project has been funded wholly or in part by the United States Environmental Protection Agency under assistance agreement (4W-02)335601-01 to (CVTC). The contents of this document do not necessarily reflect the views of Page 20 of 29 and policies of the Environmental Protection Agency, nor does the EPA endorse trade names or recommend the use of commercial products mentioned in this document."





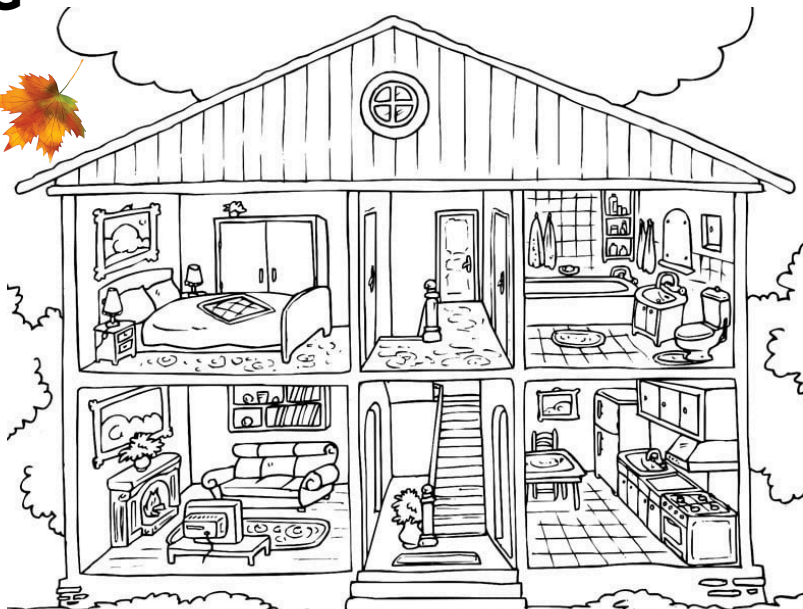
# HNATS'ET'AEN: WE ARE PLAYING

## The Trouble with Lead

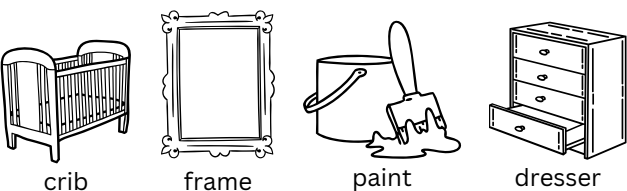
The trouble with lead is that it's so sneaky: it can be in so many things. And because it's everywhere, people have stopped thinking it's a problem!

Look at the objects in the drawing of the house. Do you see any that might have lead in them? I have put some objects around the picture to give you some ideas.

Lead is mainly a problem for us in our homes when it comes in through our water, or is in paint (if the paint is from 1978 or older). Alaska homes don't have to worry about lead pipes, but old fixtures could be a problem. Lead paint, though, could be anywhere. It slowly turns to dust that we can breathe in.



house image: edupics.com



crib

frame

paint

dresser

Furniture and decorative pieces might be coated in lead-based paint. Lead paint might taste sweet. This could encourage children to suck or chew on surfaces that may contain lead paint.

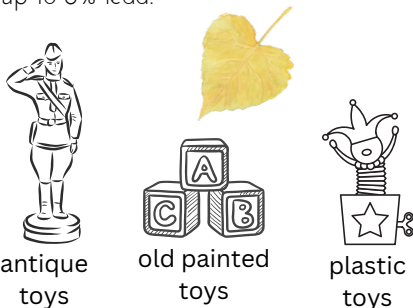


bathtub

sink

faucet

Lead used to be used in the porcelain glaze of bathtubs and sinks. We can get exposed to that lead if the glaze gets damaged. More than 60% of porcelain bathtubs in the United States contain lead, and about 75% of bathtubs made before 1978 have lead in their glaze. Faucets made until 1997 could contain up to 8% lead.



antique toys

old painted toys

plastic toys

Old toys could be made from metal containing lead, be painted with lead paint, or have lead in plastic parts. Lead is used in plastic manufacturing to make it easier to turn into different shapes. (Plastic with lead in it is not regulated, but the way.)

Lead makes glass into shiny crystal and makes paint on ceramics vibrant. Lead can get into the spices from pesticides and industrial processing, or if the soil and water where they are grown is contaminated with lead.



crystal



ceramic plate

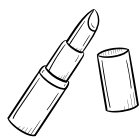


imported spices

\*Lewis J. True Colors: Unmasking Hidden Lead in Cosmetics from Low- and Middle-Income Countries. Environ Health Perspect. 2022 Apr;130(4):42001. doi: 10.1289/EHP9220. Epub 2022 Apr 13. PMID: 35417259; PMCID: PMC9007245.



blush / eye shadow



lipstick

Lead often turns up in cosmetics as a contaminant, possibly because it was in the same rock from which mineral-based colorants and mica powder were made. It may also be added intentionally because lead makes cosmetic colors pop and helps products resist moisture. (From the National Institute of Health\*)

## NAKOSU! - LET'S CLEAN UP

Keeping clean protects us from lead! Here's some Ahtna language to practice.



Wash your hands.

(singular) N'la'c'ildæx; (plural) Ula'coldæx

Did you wash your hands?

(s.) Nla'i'ghildaek da?; (pl.) Unhla' c'oldaek da?

Yes, I/we washed my hands.

(s.) Aen'sla'ghaldaek; (pl.) Aen'unla'guldaek.

No, I/we did not wash my/our hands.

(s.) Ele'e sla'ghaldaek; (pl.) Kole'e unla'guldaek.

Wipe your feet.

(s.) Ke'di'ilk'et; (pl.) Ke'do'olk'et.

Wipe the table. - U'ke'sc'eyaani k'enalditket.

Clean the toys. - U'et nayit'aeni nay'ditket.

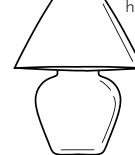
Sweep the floor. -Nadighaat.

Wash the floors. - Hwlaaxa nadohc'ots.

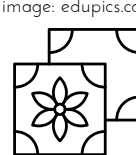
Thorough dusting. - Nau'ditket.



imported ceramics

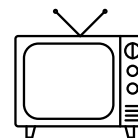


lamp



glazed tiles

Lead is used to help glaze particles melt and fuse to porous clay surfaces so that they can hold liquid. If not fired correctly, though, the glaze can come off and wind up in the food you're eating or as dust. Even "lead-free" imported ceramics might be contaminated because they get fired in contaminated furnaces that used to fire lead-containing glazes in the past.



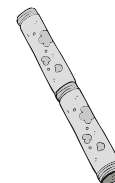
CRT T.V.



batteries

Older electronics, like cathode ray tube t.v. sets have lots of lead in them: just the screen might contain up to 8 pounds of lead in old models! (Remember the box t.v. you used to play Nintendo on? That's not even that old!) Older batteries might also contain lead. Vehicle and boat batteries still do.

Did you ever play the board game "Clue"? In older editions of the game, the lead pipe is really made of lead!



"It was Colonel Mustard in the library with the lead pipe!"