

Tamarack Water Alliance Community Zoom Meeting Wednesday, July 10, 2024 10am CT

Hello from the Tamarack Water Alliance! If you are new to our email list we welcome you. Local residents who volunteer with Tamarack Water Alliance compile and send this monthly newsletter to share updates, invitations, and informational articles.

Everyone is invited to attend our open community virtual Zoom meeting on Wednesday, July 10, 2024 at 10am CT. Topic: Carbon Capture in Minnesota: Public Lands, Fast Money, and Pipe Dreams, with Hudson Kingston, JD, Legal Director CURE. This presentation will cover the currently-proposed carbon capture projects and research that are ongoing in Minnesota. From the corn fields of the agricultural region, to the stony landscape of our boreal forests, Minnesota's landscapes are being sized up for a new industrial buildout with different technologies on different timelines and differing potential impacts. There are some unifying issues about how to think about this new big industry and whether it harms or helps people and the environment.

Hudson Kingston has a JD from the University of Iowa, a LL.M. degree from NYU, and another LL.M. from the University of Singapore. He has been working in environmental law, public health law, and consumer protection law for more than a decade. Before becoming the legal director of CURE, he worked at national and state-based nonprofits, and even spent some time working in a small backwater of the White House. He lives in Ely with his partner and their large cohort of fuzzy pets.

Register for the meeting and receive the Zoom link here

(https://tamarackwateralliance.org/php/eventreg.php?eid=16)

Download Tamarack Water Alliance fact sheets/flyers here (https://tamarackwateralliance.org/resources.html#flyers)

Sign-Up To Receive Updates from the DNR on Talon Metals Environmental Impact Statement here here (https://www.dnr.state.mn.us/input/environmentalreview/tamarack-nickel-project.html

If you believe nickel-sulfide mining is too risky in Aitkin County, Tamarack Water Alliance has yard signs with this messaging available. Your \$6 donation helps defray costs. Email waters@tamarackwateralliance.org to arrange pickup of your sign.

Volunteer with the Tamarack Water Alliance. Send us an **email** at **waters@tamarackwateralliance.org**.

Encourage your friends, family and neighbors to <u>sign up for the monthly</u> <u>Tamarack Water Alliance email</u> newsletter at http://eepurl.com/hOboEb.

Carbon Capture in Minnesota: What You Need to Know

Thanks to the Equity Fund (www.theequityfund.org) for providing with permission much of the content herein from their August 2022 Policy Brief — https://www.theequityfund.org/blog/carbon-capture-and-storage-is-a-pipe-dream-here-are-five-reasons-why Read more here

Carbon capture and storage (CCS), sometimes called carbon capture and sequestration, refers to processes that collect or "capture" carbon dioxide (CO2) from industrial processes or electricity generation, compress it into a liquid-like state, and transport it via pipeline for use in additional industrial processes or storage underground. CCS processes do not remove CO2 from the atmosphere, but prevent some emissions caused by high-emitting activities—such as coal- or gas-fired power production and plastics manufacturing—from

reaching the atmosphere. Moreover, there is no guarantee that CO2 will stay underground; the captured gases could still be released later on by leaks or earthquakes, for example....

Today, the top destination for captured carbon is still enhanced oil recovery, rather than underground storage¹¹. In other words, the biggest market for captured carbon is the fossil fuel industry, largely enabled by federal policy...

SERIOUS RISKS AND DOCUMENTED HARMS ASSOCIATED WITH ALL TYPES OF CCS PROCESSES - DANGEROUS LEAKS OR RUPTURES:

Transporting and storing carbon has a significant risk of leaks and ruptures¹² that can cause devastating impacts to nearby communities.¹³ The harm and danger of CO2 pipelines cannot be overstated, yet the risks are often overlooked in discussions of CCS as a climate solution.

During the CCS process, high-pressure CO2 is turned into a liquid-like "supercritical" state for transport.¹⁴ Moisture or contaminants can corrode the pressurized pipelines, increasing the risk of leaks and fractures. Nearby residents can be injured or even suffocated when the escaped CO2 rapidly freezes the surrounding area and displaces oxygen from the air.¹⁵ An explosion of a CCS pipeline in Satartia, Mississippi, resulted in hospitalization of dozens of residents. And in 1986, a sudden release of CO2 from Lake Nyos in Cameroon, killed more than 1,700 people and 3,500 livestock.¹⁶

References:

- 11. https://www.ciel.org/wp-content/uploads/2021/07/Confronting-the-Myth-of-Carbon-Free-Fossil-Fuels.pdf
- 12. Notably, IPCC cautions against relying on carbon capture due to concerns about safety and leaks. IPCC SR1.5, Ch. 5, Section 5.4.1.2, https://www.ipcc.ch/site/assets/uploads/2018/03/srccs_wholereport-1.pdf (noting the "non-negligible" risk of leakage)
- 13. https://www.huffpost.com/entry/gassing-satartia-mississippi-co2-pipeline n 60ddea9fe4b0ddef8b0ddc8f

- 14. https://www.ciel.org/wp-content/uploads/2021/07/Confronting-the-Myth-of-Carbon-Free-Fossil-Fuels.pdf
- 15. <u>https://www.dnv.com/oilgas/laboratories-test-sites/dense-phase-spadeadam-video.html</u>
- 16. https://pstrust.org/wp-content/uploads/2022/03/3-23-22-Final-Accufacts-CO2-Pipeline-Report2.pdf

WHY DOESN'T CCS WORK AS A CLIMATE SOLUTION?

Sometimes incorrectly referred to as "carbon removal" or "negative emissions technology," CCS was only rebranded as a potential climate solution in recent years. Unsurprisingly, the fossil fuel industry is the main backer of carbon capture and storage as a "climate solution."

PROLONGS CONTINUED RELIANCE ON FOSSIL FUELS AND FOSSIL FUEL INFRASTRUCTURE:

CCS masks the harmful carbon emissions from the fossil fuel source and enables that source to continue operating rather than being replaced with clean energy alternatives, while creating additional risks, impacts, and costs. Fossil fuels emit harmful pollution at each stage of their lifecycle—including extraction, refining, transport, use, and disposal—and carbon capture fails to address nearly all of these emissions...

FAILS TO MEANINGFULLY REDUCE HARMFUL CLIMATE POLLUTION:

Even if carbon capture technologies were more effective than proven so far, CCS facilities simply cannot reduce harmful climate emissions at a meaningful rate. A recent study shows that a carbon-capture-equipped coal plant only captures around 10 percent of the total CO2 over 20 years, meaning that the vast majority of CO2 is still released into the atmosphere.²⁹

Even the most effective carbon capture technology does not limit the greenhouse gases (GHGs) released during extraction, transport, and most of the refining processes. CCS also exacerbates GHG emissions from extraction, transport, and refining processes because power plants and industrial facilities must burn more fuel to power carbon capture equipment—as much as 40 percent more fuel.³⁰

There are much safer and natural ways to address carbon capture with the protection of forests and reforestation and the preservation of peatlands, abundant in northern Minnesota. Wind farms with battery storage and solar solutions are renewable alternatives from high power sources which use fossil fuels.

Carbon capture remains unproven, over-promised, and under-delivered. It is much more expensive than clean technologies, while the removal of most industrial emissions is not feasible. Finally, CCS often perpetuates environmental injustice with facilities already burdened with polluting often located in low income communities and communities of color in the Midwest, Texas, and the Gulf Coast.

References:

Clean, Renewable Energy and Storage for Everything. https://web.stanford.edu/group/efmh/jacobson/Articles/I/NatGasVsWWS&coal.p df

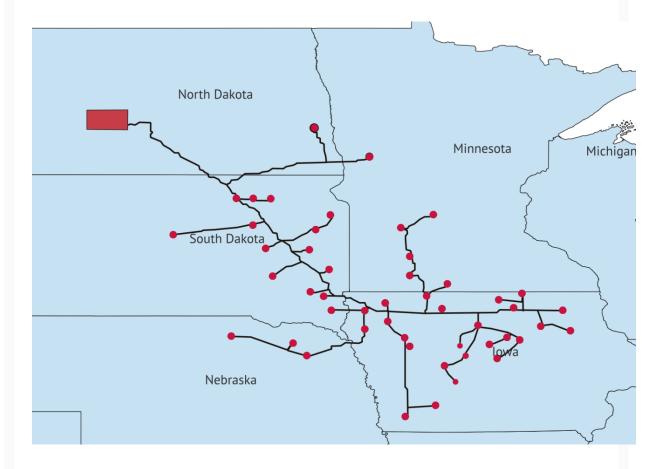
29. https://web.stanford.edu/group/efmh/jacobson/Articles/Others/19-CCS-DAC.pdf

30.

http://precaution.org/lib/ccs energy penalty for coal vs natural gas.2016.pdf

PROPOSED CO2 PIPELINES IN MINNESOTA

Multiple large-scale, CO2 pipeline networks are being proposed in the Midwest by out-of-state corporations that aim to "capture" CO2 from a variety of industrial facilities. There are currently two on the horizon in Minnesota —one from Summit Carbon Solutions called the Midwest Carbon Express and the other from Navigator CO2 Ventures called the Heartland Greenway. If built, these pipeline networks will span thousands of miles of farmland and prairie carrying CO2 from dozens of ethanol and fertilizer plants throughout the Midwest to "storage" sites in North Dakota and Illinois. Surveyors for the companies are out in Minnesota farm fields and farmers and landowners are being pressured to sign easements to allow the pipelines across their property. This is all happening before any environmental assessments, community input, meaningful tribal consultation, or broad public discussions on CO2 pipelines have occurred.



CONCLUSION

Carbon capture and storage is a bad fit for Minnesota. CCS is expensive, unproven, and risky. CCS technologies prop up the fossil fuel industry and carbon-intensive industrial activity and prolong pollution and other environmental injustices. Framing CCS as a climate solution is dangerously misleading because, in practice, the outcome of CCS is rarely climate mitigation and more often boosted oil production. At the end of the day, the false hope for CCS distracts Minnesotans from the urgent task of transitioning away from an extractive, fossil-fuel-based energy system. Instead of channeling billions of dollars each year into the CCS industry, governments, leaders, and key decision- makers should focus on proven, economical, and safe climate solutions that can lead to equitable change. Rather than falling for the false promise of CCS and "cleaner fossil fuels," Minnesota can continue on the pathway to a real zero emissions clean energy future that benefits Minnesotans

today and for years to come.

Contact Sarah Mooradian, CURE Government Relations & Policy Director, sarah@curemn.org to learn more about carbon capture and Minnesota policy. https://curemn.org/carbon-pipelines-mn/



Greenwashing: Talon's Participation in Aitkin County Rivers & Lakes Fair

Why is Talon Metals, a mineral exploration and marketing company for Rio Tinto participating in a community educational space dedicated to protecting rivers and lakes? They are marketing a lie. I imagine if they weren't donors to Long Lake Conservation Center, they'd never be allowed to participate. Talon Metals claims, without evidence, that Talon has the technology to mine safely and "all Talon wants is a fair shot." While Talon has never mined anything and has no track record, they are asking us to

trust them with our water resources.

Rio Tinto, Talons' parent company, is the fourth largest mining operation in the world. Rio Tinto does have a track record. It's a record of environmental destruction, the destruction of indigenous sacred sites (www.bbc.com/news/business-57018473 - www.becketlaw.org/media/breaking-federal-court-greenlights-destruction-of-oak-flat/), bribery, corruption (www.reuters.com/legal/rio-tinto-pay-15-million-settle-us-sec-investigation-2023-03-06/), racism, rape and sexual assault of employees (www.riotinto.com/en/news/releases/2022/rio-tinto-releases-external-review-of-workplace-culture - The report, commissioned by Rio Tinto, included surveys that found: 21 women reported attempted or actual rape or sexual assault) and community members (10. www.theguardian.com/world/2000/sep/08/davidpallister.riotinto - https://ejatlas.org/conflict/rio-tintos-lawsuit-papua-new-guinea)

They've had their shot and have failed miserably. Save our water. Stop Rio Tinto. Stop Talon.

Johnny Barber, Palisade, <u>Aitkin Independent Age Press, June 26, 2024</u> https://www.messagemedia.co/aitkin/opinion/letters/letters-from-readers---6-26-24/article_ac476548-3308-11ef-8838-6b6e222cdbbf.html

Who We Are

Tamarack Water Alliance is a group of local residents and landowners working together with others from across Minnesota to protect water and community health from the dangers of sulfide mining near our beloved lakes and wild rice beds, at the headwaters of the Kettle River and in the Mississippi River watershed. Visit our website here (https://tamarackwateralliance.org/index.html)

A proposal by a foreign owned mining company, Talon Metals/Rio Tinto to mine nickel and other metals near Tamarack in Aitkin County threatens the health of our communities. This kind of sulfide mining, especially in water-rich

environments, has never been done without severe impacts to water and the health of those downstream. Mining here is also a threat to environmental justice and the long-term economic security of nearby native and rural communities.

Review our **community slide presentation**

(tamarackwateralliance.org/docs/TamarackMineConcerns-Consolidated.pdf) and download <u>informative flyers</u> (tamarackwateralliance.org/resources.html):

- Talon Mine Risks,
- Geology of Aitkin County,
- High Sulfide Mines Create Acid Mine Drainage,
- Nickel Not Needed for Future EV Batteries,
- Minnesota's Prime Wild Rice Lakes Under Threat,
- Minnesota Regulators Poor Record In Protecting The Environment,
- Eagle Mine Environmental Report & Saving Our Meager Nickel Reserves

We will be sending this monthly newsletter to keep you informed about this project, to share information and opportunities to act, and to invite you to gatherings where you can connect with others who share a passion for clean water and community health.

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