United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240
http://www.blm.gov

October 31, 2019

In Reply Refer To:
1278-FOIA (640)
FOIA# 2019-00938
1:19-CV-01857

Austin R. Evers
American Oversight
1030 15th Street NW, Suite B255
Washington, DC 20005

Dear Mr. Evers:

This letter is an interim response to your Freedom of Information Act (FOIA) requests, dated March 5, 2019 and April 23, 2019 and assigned tracking numbers 2019-00938 and 2019-00952. In your letter, you asked for the following:

All records reflecting communications (including email messages, email attachments, calendar invitations or entries, and any handwritten or typed notes from meetings) between the custodians listed below and the following individuals and entities:

a. Any employee or representative of Antofagasta PLC, including anyone with an email address ending in antofagasta.co.uk;
b. Andronico Luksic, and anyone acting on his behalf such as a chief of staff, scheduler, or assistant;
c. Ivan Arriagada, and anyone acting on his behalf such as a chief of staff, scheduler, or assistant;
d. Any employee or representative of Twin Metals Minnesota (TMM), including anyone with an email address ending in twin-metals.com;
e. Robert Lehman (including but not limited to the email address rob.lehman@wilmerhale.com); and/or
f. Timothy Martin (including but not limited to the email address timothy.martin@wilmerhale.com).

All communications (including email messages, email attachments, calendar invitations or entries, and any handwritten or typed notes from meetings) between the custodians listed below and the following individuals and entities, regarding the mining leases of Twin Metals in Minnesota:

a. Representative Tom Emmer, and anyone acting on his behalf or serving on his

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staff, including but not limited to Christopher Maneval (Christopher.Maneval@mail.house.gov), David Fitzsimmons (David.fitzsimmons@mail.house.gov), Alyssa Anderson (alyssa.anderson@mail.house.gov), Landon Zinda (landon.zinda@mail.house.gov), and Catherine Lenz (Catherine.lenz@mail.house.gov).

b. Representative Paul Gosar, and anyone acting on his behalf or serving on his staff, including but not limited to Thomas Van Flein (tom.vanflein@mail.house.gov), Leslie Foti (leslie.foti@mail.house.gov), Rory Burke (rory.burke@mail.house.gov), and Jeff Small (jeff.small@mail.house.gov).

We are providing via email a PDF file consisting of 67 pages, which is being released in its entirety. Of these, approximately 3 pages are being withheld in parts and 3 pages are being withheld in full. We reasonably foresee that disclosure would harm an interest protected by one or more of the nine exemptions to the FOIA's general rule of disclosure.

Exemption 5 allows an agency to withhold "inter-agency or intra-agency memorandums or letters which would not be available by law to a party... in litigation with the agency." 5 U.S.C. § 552 (b) (5); see Nat'l Labor Relations Bd. v. Sears Roebuck & Co., 421 U.S. 132, 149 (1975). Exemption 5 therefore incorporates the privileges that protect materials from discovery in litigation, including the deliberative process, attorney work-product, attorney-client, and commercial information privileges.

The Federal Rule of Civil Procedure 26(c) (7), which provides that "for good cause shown…a trade secret or other confidential research, development or commercial information" is protected from discovery. This qualified privilege is available "at least to the extent that this information is generated by the Government itself in the process leading up to the awarding of a contract.

Keiosha Alexander, Bureau of Land Management (BLM) FOIA Officer, is responsible for this release. Briana Collier, Attorney Advisor in the Office of the Solicitor, was consulted.

If you have any questions regarding this request, please contact Sheriff Oladepo, BLM WO FOIA Specialist, at (202) 912-7650 or via email at BLM_WO_FOIA@blm.gov.

Sincerely,

FOR:

Ryan Witt, Acting Chief
Division of Intergovernmental and External Affairs

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From:	Bob McFarlin
To:	kbenedetto@blm.gov
Subject:	[EXTERNAL] Twin Metals Project Update
Date:	Thursday, May 24, 2018 2:09:24 PM
Attachments:	TM_FactSheet_May_2018_Web_FINAL.pdf ProjectInfoRolloutMap_FINAL.pdf

Dear Kathy,

Twin Metals Minnesota has made significant progress over the past four years in furthering the design of its underground mine project in northeast Minnesota. Today Twin Metals is releasing updated information on the project based on the progress made in ongoing engineering, environmental, economic and technical studies. The release of updated project information also continues the company's ongoing efforts to keep the public informed of potential project details as they become more certain. You may recall Twin Metals' last project update was in May of last year. Today's new project information does not represent Twin Metals' formal mine project proposal, so the information is still subject to change as the project development process moves forward.

First, here is a reminder of Twin Metals project information released last year:

- **TMM Project Location**: The Twin Metals project site is located approximately nine miles southeast of the city of Ely and 11 miles northeast of the city of Babbitt. The project is located outside the of the Boundary Waters Canoe Area Wilderness and its surrounding state and federal buffer zones, in an area where mining is both allowed and encouraged by state and federal law.
- **Underground Mine:** The Twin Metals project will be an underground mining operation. Underground mining will greatly reduce the surface impacts of mine operations and allow Twin Metals to mine without generating waste rock stockpiles.
- **Value of Targeted Minerals:** Estimated at (b) (5) in-ground mineral value for TMM project.
- **Production Rate:** Twin Metals plans to process approximately 20,000 tons of mineralized ore per day using underground mining operations.
- **Tailings Management:** Fifty Percent of the tailings material generated by mine operations will be "backfilled" into the underground mine for permanent storage. Studies conducted by Twin Metals show that the tailings material will be non-acid generating.
- **Job estimates**: Based on current estimates, the Twin Metals project will generate 650 direct jobs, 1,300 spin-off jobs in the region, and an estimated 4 million construction hours during construction phase.
- **Investment estimates**: Twin Metals projects a $1.2 billion total investment in advance of operations.

Regarding the new project information released today, I have attached the map and a new general project description that have been posted to the Twin Metals website (http://www.twin-metals.com/about-the-project/). This new information includes:

- **Concentrator Location:** Twin Metals plans to locate the mine's processing facilities approximately one mile south of the underground mine location on land owned by Twin

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Metals. The processing site would include access to the underground mine and activities related to recovering the target minerals from ore. Twin Metals plans to propose accessing the mine by tunnels at the processing site.

- **Surface Tailings Storage Facility:** Twin Metals intends to store about half of tailings as permanent cemented backfill in the underground mine. The remaining tailings would be stored in a modern, lined surface tailings storage facility (TSF) located adjacent to the Peter Mitchell Mine southwest of the city of Babbitt, outside the Rainy River Watershed. (This location was generally referenced in the 2017 project update, but is now more certain and can be referenced with greater detail.) Testing shows the tailings would be non-acid generating. Extensive additional testing will be conducted under the supervision of the Minnesota Department of Natural Resources and federal agencies.

- **New Babbitt Office:** Twin Metals plans to open an office in Babbitt, close to the time when construction begins on the project (following the EIS and permitting processes). Twin Metals will also maintain its current office in Ely. TMM plans to minimize traffic and maximize employment opportunities across the region by busing mine employees from both the Ely and Babbitt locations. TMM plans to propose main traffic access to the mine site using existing roads near Babbitt where possible.

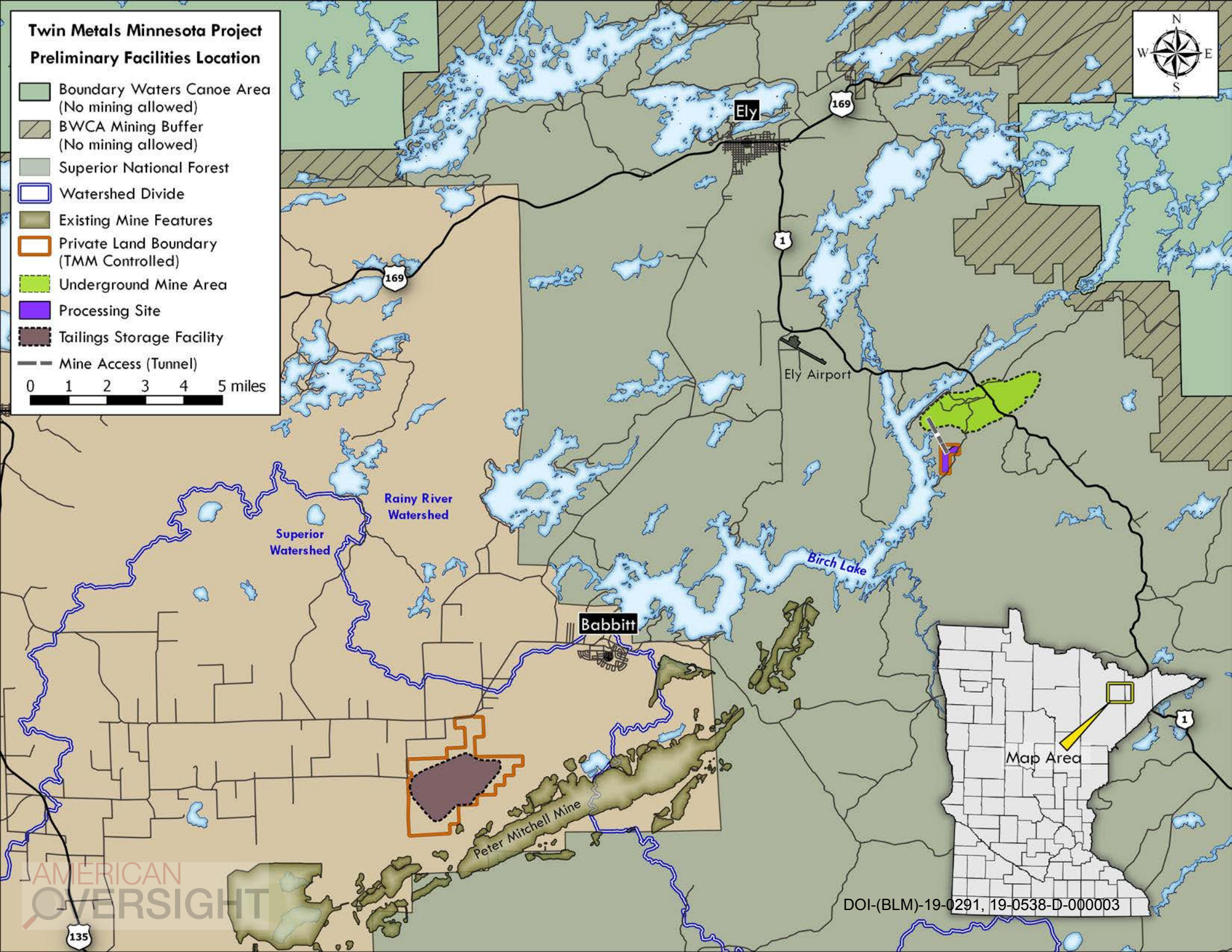
Twin Metals has invested more than $400 million to date in acquisition, exploration, technical, environmental, and other project development activities. The engineering, technical, environmental and economic work on the project will continue as Twin Metals works toward its goal of submitting in approximately 18 months a formal mine project proposal to state and federal agencies for extensive review through the Environmental Impact Statement (EIS) process.

Twin Metals is excited to continue moving forward with designs for its underground mine proposal. The Twin Metals Project continues to offer Minnesota an extraordinary opportunity for long-term, environmentally sound economic growth and job creation in local communities in the northeastern part of the state, as well as producing significant state and local tax, royalty and school trust revenues. Thank you for your continued interest and support.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com

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Twin Metals Minnesota Project
Preliminary Facilities Location
Boundary Waters Canoe Area (No mining allowed)
BWCA Mining Buffer (No mining allowed)
Superior National Forest
Watershed Divide
Existing Mine Features
Private Land Boundary (TMM Controlled)
Underground Mine Area
Processing Site
Tailings Storage Facility
Mine Access (Tunnel)
0 1 2 3 4 5 miles
N
W
E
S
Ely
169
1
Ely Airport
Rainy River Watershed
Superior Watershed
Birch Lake
Babbitt
Peter Mitchell Mine
Map Area
135
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DOI-(BLM)-19-0291, 19-0538-D-000003



TWIN METALS MINNESOTA

ABOUT TWIN METALS MINNESOTA

TWIN METALS MINNESOTA LLC (TMM) is a Minnesota mining company focused on designing, constructing and operating an underground copper, nickel, platinum, palladium, gold and silver mining project and is committed to doing so in an environmentally responsible way. TMM is a wholly owned subsidiary of Antofagasta plc, one of the top 10 global copper producers. The company currently operates in offices in Ely and St. Paul, Minnesota.

The Twin Metals Project will target the valuable minerals within the Maturi deposit approximately nine miles southeast of Ely, and 11 miles northeast of Babbitt, part of the Duluth Complex geologic formation. TMM plans to propose locating the processing site on about 100 acres of TMM-owned land approximately one mile south of the underground mine site. The processing site would include access to the underground mine and activities related to recovering the target minerals from ore.

TMM is making significant progress advancing the design of the underground mine project, pursuing compact and efficient designs. The company expects to submit a formal mine plan proposal in the next 18 months, initiating a rigorous and thorough environmental review by multiple state and federal agencies as required by law.

INSIDE THE PROJECT

- Once operational, TMM expects to directly employ 650 people long-term in northeastern Minnesota and to create an estimated 1,300 spinoff jobs in other industries.
- TMM plans to employ geologists, engineers, carpenters, safety inspectors, process equipment operators, surveyors, mechanics, electricians, miners, truck drivers, accountants, instrumentation technicians and more.
- TMM anticipates processing 20,000 tons of ore per day from underground mining.
- State and federal environmental requirements must be met or exceeded, or the TMM Project will not be authorized to move forward.
- The TMM Project will generate significant tax and royalty revenue supporting state and local governments, and the education of nearly 900,000 K-12 students statewide.
- The minerals mined will support the domestic economy, boosting job creation, spurring growth and producing metals necessary for the emerging green economy.

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SPURRING ECONOMIC DEVELOPMENT

The TMM Project represents an extraordinary opportunity for economic growth and job creation regionally and statewide.

Investment: To date, more than $400 million has been invested in the TMM Project, and approximately $1.2 billion will be invested in further design, permitting and construction for the TMM underground mine project.

Local Job Creation: Once operational, TMM expects to directly employ 650 people long-term in northeastern Minnesota, and to create another 1,300 non-mining jobs in industries such as equipment suppliers, manufacturing, retail, healthcare, automotive and more. TMM plans to propose opening another office in Babbitt and busing mine employees to the mine site from both Ely and Babbitt locations, minimizing traffic and maximizing employment opportunities across the region.

Several million labor hours will be generated during construction, on par with the number of construction and related professional jobs created by projects such as U.S. Bank Stadium and Target Field in the Twin Cities. Even in its design stage, the TMM Project has supported as many as 200 direct and consultant/contractor positions and additional spinoff jobs.

Mining Wages: Mining offers living wages that can support families, send children to college, provide for retirement and build local communities. According to the U.S. Bureau of Labor Statistics, the average annual wage for a Minnesota mining job in 2016 was $77,232, more than 41 percent greater than the average wage for all other industries. A 2017 study conducted by Praxis Strategy Group found that the average tourism industry wage in northeastern Minnesota was $18,200, further solidifying the strong economic impact of the mining industry in Minnesota.

ENVIRONMENTAL STEWARDSHIP

Twin Metals Minnesota recognizes environmental conservation as a core value and remains committed to protecting Minnesota's wilderness, natural environment and recreational resources. Today's environmental regulations tightly control how mines are designed and operated, and require bankruptcy-proof financial assurance for reclamation and closure performance. The Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers and other state and federal agencies will enforce regulations protecting water, soil, animals and air.

The TMM Project will minimize the surface footprint of mining activity by using underground mining operations coupled with storing half of tailings material as permanent cemented backfill in the underground mine. This method would allow Twin Metals to mine without generating waste rock stockpiles. The remaining tailings would be stored on a modern, lined surface tailings storage facility near the Peter Mitchell Mine southwest of the city of Babbitt, Minnesota, and outside the Rainy River Watershed. Testing shows the tailings would be non-acid generating. Extensive additional testing will be conducted under the supervision of the Minnesota Department of Natural Resources and federal agencies.

MINERALS FOR A SUSTAINABLE FUTURE

Copper, nickel and platinum group metals are critical aspects of a sustainable future including construction, communications, power distribution, national defense, medicine and renewable green energy. The TMM Project will contribute to establishing Minnesota as a world leader in the production of green energy minerals used in wind turbines, hybrid and electric vehicles, batteries and solar energy panels.



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DOI-(BLM)-19-0291, 19-0538-D-000005

From: Google Calendar on behalf of jkatusak@blm.gov
To: briana.collier@sol.doi.gov; jkatusak@blm.gov; karen.hawbecker@sol.doi.gov
Subject: [Update] Ext. Mtg. w/ Twin Metals
Date: Friday, December 15, 2017 11:14:13 AM

Hi Karen,

I just wanted to give you a heads-up regarding the below external meeting this after with Kathy Benedetto and Bob McFarlin from Twin Metals. The litigation is not expected to be the topic of conversation, but please let me know if you would would like someone from DMR to attend.

Thanks,
Justin

Ext. Mtg. w/ Twin Metals

Anne Williamson, Twin Metals VP of Environment and Sustainability
Bob McFarlin, Government Affairs Advisor

On Wed, Dec 13, 2017 at 12:45 PM, Bob McFarlin wrote:
Hi Kathy,

I hope this finds you well. Wondering if you would be available for a short visit this Friday (12/15). I am coming to DC for a quick meeting with USFS Chief Tooke and would love to touch base. I will be traveling with Twin Metals' VP of Environment and Sustainability, Anne Williamson, who you met in Minnesota this past summer. Might you be available after noon on Friday? Also wondering if Mitch Leverette might also be available. (I don't have his direct e-mail.) Thanks for your consideration.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com

When	Fri Dec 15, 2017 2pm – 2:30pm Eastern Time
Where	BLM-WO MIB RM5653 Conference Room (map)
Video call	https://plus.google.com/hangouts/_/doi.gov/lthurn
Who	• lthurn@blm.gov - organizer, optional • mleveret@blm.gov • aaron.moody@sol.doi.gov • jkatusak@blm.gov • kbenedetto@blm.gov • tspisak@blm.gov • rjefferson@blm.gov - optional • bwinston@blm.gov - optional

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- ymackthompson@blm.gov - optional
- jbrune@blm.gov - optional

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From: Google Calendar on behalf of Kathleen Benedetto
To: umassey@blm.gov
Subject: Accepted: Catch-up Meeting w/Bob McFarlin @ Tue Apr 24, 2018 11am - 11:30am (EDT) (umassey@blm.gov)
Attachments: invite.ics

Kathleen Benedetto has accepted this invitation.
Catch-up Meeting w/Bob McFarlin
Address:
1849 C Street, NW, Rm: 5653
Washington, DC 20240
When Tue Apr 24, 2018 11am – 11:30am Eastern Time
Where BLM-WO MIB RM5653 Conference Room (map <https://maps.google.com/maps?q=BLM-WO+MIB+RM5653+Conference+Room&hl=en>
)
Video call https://hangouts.google.com/hangouts/_/doi.gov/umassey <https://hangouts.google.com/hangouts/_/doi.gov/umassey?
hceid=dW1hc3NleUBibG0uZ292.4at21r49uhv15kam907fd4tapl>
Calendar umassey@blm.gov
Who • umassey@blm.gov - organizer
• kbenedetto@blm.gov
• bmcfarlin@twin-metals.com
• ymackthompson@blm.gov - optional

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Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More
<https://support.google.com/calendar/answer/37135#forwarding> .

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From:	Google Calendar on behalf of Marshall Critchfield
To:	lthurn@blm.gov
Subject:	Accepted: Ext. Mtg. Twin Metals @ Tue Apr 18, 2017 2:30pm - 3pm (lthurn@blm.gov)
Attachments:	invite.ics

Marshall Critchfield has accepted this invitation.
Ext. Mtg. Twin Metals
---------- Forwarded message ----------
From: Bob McFarlin
Date: Tue, Apr 11, 2017 at 9:50 AM
Subject: Meeting Next Week?
To: "Kathleen_Benedetto@ios.doi.gov <mailto:Kathleen_Benedetto@ios.doi.gov> "

Dear Kathy,

Would you be available to meet with me next week - later in the afternoon next Tuesday, any time Wednesday up to 1:30 pm., or Wednesday after 3:30 pm? I will be in DC for a short visit. Thanks.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com <https://www.google.com/url?q=http%3A%2F%2Fwww.Twin-Metals.com&sa=D&ust=1491943332219000&usg=AFQjCNHVhuvbDui690tH_GAjFbWptD6Tww>
When Tue Apr 18, 2017 2:30pm – 3pm Eastern Time
Where BLM-WO MIB RM5653 Conference Room (map <https://maps.google.com/maps?q=BLM-WO+MIB+RM5653+Conference+Room&hl=en>)
Video call https://plus.google com/hangouts/_/doi.gov/lthurn <https://plus.google.com/hangouts/_/doi.gov/lthurn?hceid=bHRodXJuQGJsbS5nb3Y.5kpgqnifna7npfd1squ2th10ic>
Calendar lthurn@blm.gov
Who • lthurn@blm.gov - organizer, optional
• kathleen_benedetto@ios.doi.gov
• marshall_critchfield@ios.doi.gov
• ymackthompson@blm.gov - optional

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From:	Google Calendar on behalf of Beverly Winston
To:	lthurn@blm.gov
Subject:	Accepted: Ext. Mtg. w/ Twin Metals @ Fri Dec 15, 2017 2pm - 2:30pm (lthurn@blm.gov)
Attachments:	invite.ics

Beverly Winston has accepted this invitation.
Ext. Mtg. w/ Twin Metals
Anne Williamson, Twin Metals VP of Environment and Sustainability
Bob McFarlin, Government Affairs Advisor
On Wed, Dec 13, 2017 at 12:45 PM, Bob McFarlin wrote:
Hi Kathy,

I hope this finds you well. Wondering if you would be available for a short visit this Friday (12/15). I am coming to DC for a quick meeting with USFS Chief Tooke and would love to touch base. I will be traveling with Twin Metals' VP of Environment and Sustainability, Anne Williamson, who you met in Minnesota this past summer. Might you be available after noon on Friday? Also wondering if Mitch Leverette might also be available. (I don't have his direct e-mail.) Thanks for your consideration.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com <https://www.google.com/url?q=http%3A%2F%2Fwww.Twin-Metals.com&sa=D&ust=1513269643283000&usg=AFQjCNGVmvMnx9x3Zve9ZcRDh6lvJOZfig>
When Fri Dec 15, 2017 2pm – 2:30pm Eastern Time
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Calendar lthurn@blm.gov
Who • lthurn@blm.gov - organizer, optional
• jkatusak@blm.gov
• kbenedetto@blm.gov
• mleveret@blm.gov
• tspisak@blm.gov
• rjefferson@blm.gov - optional
• jbrune@blm.gov - optional
• ymackthompson@blm.gov - optional
• bwinston@blm.gov - optional

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From:	Google Calendar on behalf of Justin Katusak
To:	lthurn@blm.gov
Subject:	Accepted: Ext. Mtg. w/ Twin Metals @ Fri Dec 15, 2017 2pm - 2:30pm (lthurn@blm.gov)
Attachments:	invite.ics

Justin Katusak has accepted this invitation.
Ext. Mtg. w/ Twin Metals
Anne Williamson, Twin Metals VP of Environment and Sustainability
Bob McFarlin, Government Affairs Advisor
On Wed, Dec 13, 2017 at 12:45 PM, Bob McFarlin wrote:
Hi Kathy,

I hope this finds you well. Wondering if you would be available for a short visit this Friday (12/15). I am coming to DC for a quick meeting with USFS Chief Tooke and would love to touch base. I will be traveling with Twin Metals' VP of Environment and Sustainability, Anne Williamson, who you met in Minnesota this past summer. Might you be available after noon on Friday? Also wondering if Mitch Leverette might also be available. (I don't have his direct e-mail.) Thanks for your consideration.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com <https://www.google.com/url?q=http%3A%2F%2Fwww.Twin-Metals.com&sa=D&ust=1513356433619000&usg=AFQjCNEgyusAcCGLlovzkVl3zqVBnZFShQ>
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• jkatusak@blm.gov
• kbenedetto@blm.gov
• mleveret@blm.gov
• tspisak@blm.gov
• aaron.moody@sol.doi.gov
• rjefferson@blm.gov - optional
• jbrune@blm.gov - optional
• ymackthompson@blm.gov - optional
• bwinston@blm.gov - optional

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From: Google Calendar on behalf of Mitchell Leverette
To: lthurn@blm.gov
Subject: Accepted: Ext. Mtg. w/ Twin Metals @ Fri Dec 15, 2017 2pm - 2:30pm (lthurn@blm.gov)
Attachments: invite.ics

Mitchell Leverette has accepted this invitation.
Ext. Mtg. w/ Twin Metals
Anne Williamson, Twin Metals VP of Environment and Sustainability
Bob McFarlin, Government Affairs Advisor
On Wed, Dec 13, 2017 at 12:45 PM, Bob McFarlin wrote:
Hi Kathy,

I hope this finds you well. Wondering if you would be available for a short visit this Friday (12/15). I am coming to DC for a quick meeting with USFS Chief Tooke and would love to touch base. I will be traveling with Twin Metals' VP of Environment and Sustainability, Anne Williamson, who you met in Minnesota this past summer. Might you be available after noon on Friday? Also wondering if Mitch Leverette might also be available. (I don't have his direct e-mail.) Thanks for your consideration.

Bob McFarlin
Government Affairs Advisor
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612-655-2099 (c)

www.Twin-Metals.com <https://www.google.com/url?q=http%3A%2F%2Fwww.Twin-Metals.com&sa=D&ust=1513357029341000&usg=AFQjCNGhg4wF8yaqFZ4zNRytDszt9coMpA>
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• ymackthompson@blm.gov - optional
• bwinston@blm.gov - optional

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From:	Google Calendar on behalf of Kathleen Benedetto
To:	lthurn@blm.gov
Subject:	Accepted: Ext. Mtg. w/ Twin Metals @ Fri Dec 15, 2017 2pm - 2:30pm (lthurn@blm.gov)
Attachments:	invite.ics

Kathleen Benedetto has accepted this invitation.
Ext. Mtg. w/ Twin Metals
Anne Williamson, Twin Metals VP of Environment and Sustainability
Bob McFarlin, Government Affairs Advisor
On Wed, Dec 13, 2017 at 12:45 PM, Bob McFarlin wrote:
Hi Kathy,

I hope this finds you well. Wondering if you would be available for a short visit this Friday (12/15). I am coming to DC for a quick meeting with USFS Chief Tooke and would love to touch base. I will be traveling with Twin Metals' VP of Environment and Sustainability, Anne Williamson, who you met in Minnesota this past summer. Might you be available after noon on Friday? Also wondering if Mitch Leverette might also be available. (I don't have his direct e-mail.) Thanks for your consideration.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com <https://www.google.com/url?q=http%3A%2F%2Fwww.Twin-Metals.com&sa=D&ust=1513214567375000&usg=AFQjCNEs5habP5xnR5wthESttkfmlx9SUg>
When Fri Dec 15, 2017 2pm – 2:30pm Eastern Time
Where BLM-WO MIB RM5653 Conference Room (map <https://maps.google.com/maps?q=BLM-WO+MIB+RM5653+Conference+Room&hl=en>)
Video call https://plus.google com/hangouts/_/doi.gov/lthurn <https://plus.google.com/hangouts/_/doi.gov/lthurn?hceid=bHRodXJuQGJsbS5nb3Y.6ugk7bntnq07g6btov4udmt5ia>
Calendar lthurn@blm.gov
Who • lthurn@blm.gov - organizer, optional
• jkatusak@blm.gov
• kbenedetto@blm.gov
• mleveret@blm.gov
• tspisak@blm.gov
• rjefferson@blm.gov - optional
• jbrune@blm.gov - optional
• ymackthompson@blm.gov - optional

Your attendance is optional.
Invitation from Google Calendar <https://www.google.com/calendar/>
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Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <https://support.google.com/calendar/answer/37135#forwarding> .

AMERICAN OVERSIGHT

From:	Google Calendar on behalf of Timothy Spisak
To:	lthurn@blm.gov
Subject:	Accepted: Ext. Mtg. w/ Twin Metals @ Fri Dec 15, 2017 2pm - 2:30pm (lthurn@blm.gov)
Attachments:	invite.ics

Timothy Spisak has accepted this invitation.
Ext. Mtg. w/ Twin Metals
Anne Williamson, Twin Metals VP of Environment and Sustainability
Bob McFarlin, Government Affairs Advisor
On Wed, Dec 13, 2017 at 12:45 PM, Bob McFarlin wrote:
Hi Kathy,

I hope this finds you well. Wondering if you would be available for a short visit this Friday (12/15). I am coming to DC for a quick meeting with USFS Chief Tooke and would love to touch base. I will be traveling with Twin Metals' VP of Environment and Sustainability, Anne Williamson, who you met in Minnesota this past summer. Might you be available after noon on Friday? Also wondering if Mitch Leverette might also be available. (I don't have his direct e-mail.) Thanks for your consideration.

Bob McFarlin
Government Affairs Advisor
Twin Metals Minnesota
380 St. Peter St., Suite 705
St. Paul, MN 55102
612-655-2099 (c)

www.Twin-Metals.com <https://www.google.com/url?q=http%3A%2F%2Fwww.Twin-Metals.com&sa=D&ust=1513215897843000&usg=AFQjCNF75KvyJlTPWWDpYCOUevEITRTbow>
When Fri Dec 15, 2017 2pm – 2:30pm Eastern Time
Where BLM-WO MIB RM5653 Conference Room (map <https://maps.google.com/maps?q=BLM-WO+MIB+RM5653+Conference+Room&hl=en>)
Video call https://plus.google com/hangouts/_/doi.gov/lthurn <https://plus.google.com/hangouts/_/doi.gov/lthurn?hceid=bHRodXJuQGJsbS5nb3Y.6ugk7bntnq07g6btov4udmt5ia>
Calendar lthurn@blm.gov
Who • lthurn@blm.gov - organizer, optional
• jkatusak@blm.gov
• kbenedetto@blm.gov
• mleveret@blm.gov
• tspisak@blm.gov
• rjefferson@blm.gov - optional
• jbrune@blm.gov - optional
• ymackthompson@blm.gov - optional

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AMERICAN OVERSIGHT

From:	Google Calendar on behalf of Kathleen Benedetto
To:	ymackthompson@blm.gov
Subject:	Accepted: Ext. Mtg. with Timothy Martin @ Fri Mar 24, 2017 10am - 10:30am (ymackthompson@blm.gov)
Attachments:	invite.ics

Kathleen Benedetto has accepted this invitation.
Ext. Mtg. with Timothy Martin
When Fri Mar 24, 2017 10am – 10:30am Eastern Time
Where BLM-WO MIB RM5653 Conference Room (map <https://maps.google.com/maps?q=BLM-WO+MIB+RM5653+Conference+Room&hl=en>
)
Video call https://plus.google com/hangouts/_/doi.gov/ymackthompson <https://plus.google com/hangouts/_/doi.gov/ymackthompson?
hceid=eW1hY2t0aG9tcHNvbkBibG0uZ292.9leopajok84d94np3luits4cdk>
Calendar ymackthompson@blm.gov
Who • ymackthompson@blm.gov - organizer, optional
• marshall_critchfield@ios.doi.gov
• kathleen_benedetto@ios.doi.gov
• lthurn@blm.gov - optional

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Invitation from Google Calendar <https://www.google.com/calendar/>
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ymackthompson@blm.gov.
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<https://support.google.com/calendar/answer/37135#forwarding> .

AMERICAN OVERSIGHT

From: Google Calendar on behalf of BLM-WO MIB RM5071 Conference Room
To: ymackthompson@blm.gov
Subject: Accepted: Ext. Mtg. with Timothy Martin @ Fri Mar 24, 2017 10am - 10:30am (ymackthompson@blm.gov)
Attachments: invite.ics

BLM-WO MIB RM5071 Conference Room has accepted this invitation.
Ext. Mtg. with Timothy Martin
When Fri Mar 24, 2017 10am – 10:30am Eastern Time
Where BLM-WO MIB RM5071 Conference Room (map <https://maps.google.com/maps?q=BLM-WO+MIB+RM5071+Conference+Room&hl=en>
)
Video call https://plus.google com/hangouts/_/doi.gov/ymackthompson <https://plus.google com/hangouts/_/doi.gov/ymackthompson?
hceid=eW1hY2t0aG9tcHNvbkBibG0uZ292.9leopajok84d94np3luits4cdk>
Calendar ymackthompson@blm.gov
Who • ymackthompson@blm.gov - organizer, optional
• marshall_critchfield@ios.doi.gov
• kathleen_benedetto@ios.doi.gov
• lthurn@blm.gov - optional

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<https://support.google.com/calendar/answer/37135#forwarding> .

AMERICAN OVERSIGHT

From:	Google Calendar on behalf of Kathleen Benedetto
To:	dmpagenk@blm.gov
Subject:	Accepted: Twin Metals - Brief update on project issues and activities @ Mon Jul 23, 2018 4pm - 4:30pm (EDT) (dmpagenk@blm.gov)
Attachments:	invite.ics

Kathleen Benedetto has accepted this invitation.
Twin Metals - Brief update on project issues and activities
The two attending at 4:00 p.m. on 7/23 would be myself and Anne Williamson, Twin Metals VP for Environment and Sustainability. Kathy knows Anne.
When Mon Jul 23, 2018 4pm – 4:30pm Eastern Time
Where Room 5650 (map <https://maps.google.com/maps?q=Room+5650+&hl=en>)
Video call https://hangouts.google.com/hangouts/_/doi.gov/dmpagenk <https://hangouts.google.com/hangouts/_/doi.gov/dmpagenk?hceid=ZG1wYWdlbmtAYmxtLmdvdg.74mt3cldn5sbhfcs8401onqir3>
Calendar dmpagenk@blm.gov
Who • dmpagenk@blm.gov - organizer
• kbenedetto@blm.gov
• bmcfarlin@twin-metals.com
• ymackthompson@blm.gov

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To stop receiving these emails, please log in to https://www.google.com/calendar/ and change your notification settings for this calendar.
Forwarding this invitation could allow any recipient to modify your RSVP response. Learn More <https://support.google.com/calendar/answer/37135#forwarding> .

AMERICAN OVERSIGHT

From: Benedetto, Kathleen
To: awilliamson@twin-metals.com
Subject: Can you call me?
Date: Tuesday, February 6, 2018 2:51:57 PM

Thanks. KB

--
Kathleen Benedetto
Senior Adviser
Bureau of Land Management
Room 5648, MIB
1849 C Street NW
Washington, DC 20240
Direct: (202) 208-5934
Cell: (202) 336-9318

AMERICAN OVERSIGHT

From:	Krauss, Jeff
To:	Brian Steed; Michael Nedd
Cc:	Kathleen Benedetto; Cally Younger; Peter Mali; Daniel DuBray; Beverly Winston; Patrickshh Wilkinson; Jill Ralston
Subject:	Comm Materials for Twin Metals
Date:	Thursday, December 21, 2017 9:09:20 PM
Attachments:	2017.12.15 clean Twin Metals - Talking points_Q&A.docx TMM_notifications_12.21.17v2.docx Twin Metals Talking Points (short version).docx

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Brian and Mike,

Please find attached the talking points and Q&As that the solicitors provided.
Also attached is a notification list based on those people contacted when the leases were denied. There will be NO press release per DOI Comms, just and "if asked" statement

We need to decide if we contact the NGOs and the small towns we contacted before. In addition, we need to decide who will make high-level contacts.
BLM Leg Affairs will be ready to handle the Hill, at OCL's discretion.

Jeff

--

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New M-Opinion, M-___, Reverses M-37036 Regarding Twin Metals' Renewal Rights for Preference Right Leases Within the Superior National Forest, Minnesota

TALKING POINTS

- (b) (5) DPP [redacted]

Q & A

(b) (5) DPP [redacted]

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(b) (5) DPP

[redacted]

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(b) (5) DPP

[redacted]

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(b) (5) DPP

[redacted]

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DRAFT Outreach Plan on New M-Opinion: Dec. 22, 2017						
Timing	**Responsible**	**Affiliation**	**Group**	**Contact**	**Contact Info**	**Type of Contact**
		MN State Government	Governor Mark Dayton	Mark Dayton	(651) 201-3400 (main number)	Phone Call Also, Dean is to contact the Department of Natural Resources (see below) and ask that they ensure the Governor's Office is made aware)
		Surface manager	U.S. Forest Service	Tony Tooke (Chief)		
		Surface manager	U.S. Forest Service	Kathleen Atkinson (Regional Forester) Or Beth Borst (Deputy Regional Forester) If she isn't in the Deputy RF is Mary Beth Borst at 3646	414-297-3765 (Kathleen) OR 414-297-3646 (Beth)	
		Applicant	Twin Metals Minnesota	Bob McFarland (Gov Affairs)		
		Applicant	Twin Metals Minnesota	Ian Duckworth, (Chief Operating Officer)	iduckworth@twin-metals.com	Phone Call
		Applicant	Twin Metals Minnesota	Anne Williamson	awilliamson@twin-metals.com	CC on Email to CEO w/ letter attached
	BLM Leg Affairs	Congressional DC	Rep. Rick Nolan (D-MN8)	Rick Nolan	(202) 225-6211	Phone Call
	BLM Leg Affairs	Congressional DC	Rep. Betty McCollum (D-MN4)	Rep. McCollum	(202) 225-6631	Phone Call
	BLM Leg Affairs	Congressional DC	Sen. Amy Klobuchar (D-MN)	Sen. Klobuchar	(202) 224-3244	Phone Call
	BLM Leg Affairs	Congressional DC	Sen. Al Franken (D-MN)	Sen. Franken	(202) 224-5641	Phone Call
	BLM Leg Affairs	Congressional DC	Rep. Keith Ellison (D-MN5)	Kari Moe (Chief of Staff)	Kari.Moe@mail.house.gov	Phone call
	BLM Leg Affairs	Congressional DC	Rep. Tom Emmer (MN-06)	Landon Zinda (Dep Leg Director)	landon.zinda@mail.house.gov	Phone call

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	Dean Gettinger District Manger	MN State Government	MN Department of Natural Resources	Commissioner Tom Landwehr	(651) 296-6157 commissioner.dnr@state.mn.us	Phone Call
	Northeastern States District Office (DO)	MN State Government	Minnesota House of Representatives	Representative Erik Simonson (D-07B)	rep.erik.simonson@house.mn	Email
	Dean Gettinger (Northeastern States DM)	Local Government	City of Ely	Mayor Chuck Novak	mayorchucknovak@ely.mn.us	Phone Call & Email
	Northeastern States DO	Local Government	City of Aurora	Mayor Mary Hess	cityclerk@ci.aurora.mn.us	Email
	Northeastern States DO	Local Government	City of Babbitt	Mayor Andrea Zupancich	andreazup@hotmail.com	Email
At time of announcement	Northeastern States DO	Local Government	City of Biwabik	Mayor Jim Weikum	jimweikum@gmail.com	Email
At time of announcement	Northeastern States DO	Local Government	City of Chisholm	Mayor Michael A. Jugovich	Admin Staff: mgornick@ci.chisholm.mn.us	Email
At time of announcement	Northeastern States DO	Local Government	Embarrass Township	Diane Nelmark (Town Clerk)	embarrasstownship@frontiernet.net	Email
At time of announcement	Northeastern States DO	Local Government	City of Hoyt Lakes	Mayor Mark Skelton	mayor@hoytlakes.com	Email
At time of announcement	Northeastern States DO	Local Government	City of Virginia	Mayor Larry Cuffe, Jr	cuffel@virginiamn.us	Email
At time of announcement	Northeastern States DO	Local Government	City of Winton	Mayor Lee Tessier	wintoncityclerk@gmail.com	Email
At time of announcement	Northeastern States DO	Local Government	City of Evelyth	Mayor Robert Vlaisavljevich	mayorandcouncil@evelethmn.com	Email
At time of announcement	Northeastern States DO	Local Government	City of Gilbert	Mayor Rob Kutsi	robkutsi@gilbertmn.org	Email
At time of announcement	Northeastern States DO	Local Government	City of Hibbing	Mayor Rick Cannata	rcannata@ci.hibbing.mn.us	Email
At time of announcement	Northeastern States DO	Local Government	City of Duluth	Mayor Emily Larson	pjents@duluthmn.gov	Email
At time of announcement	Northeastern States DO	Local Government	Eagles Nest Township	Andy Urban (Supervisor)	ensupervisorurban@frontier.com	Email

Commented [WBS1]: At a minimum Mayor Novak should be called among the municipalities The others could be dropped, although they were contacted last time

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At time of announcement	Northeastern States DO	Local Government	St. Louis County	Frank Jewell (County Commissioner)	jewellf@stlouiscountymn.gov	Email
At time of announcement	Northeastern States DO	Local Government	St. Louis County	Pete Stauber (County Commissioner)	stauberp@stlouiscountymn.gov	Email
At time of announcement	Northeastern States DO	Local Government	St. Louis County	Tom Rukavina (County Commissioner)	rukavinat@stlouiscountymn.gov	Email
At time of announcement	Northeastern States DO	Local Government	Cook County	Frank Moe (County Commissioner)	frank.moe@co.cook mn.us	Email
At time of announcement	Northeastern States DO	Tribe	Fon-du-Lac Reservation	April McCormick Grand Portage Lands Manager	aprilmm@grandportage.com	Email
At time of announcement	Northeastern States DO	Tribe	Bois Forte Band of Chippewa	Kevin Leecy (Tribal Chair)	kevin.leecy@boisforte-nsn.gov	Email
At time of announcement	Northeastern States DO	Tribe	Grand Portage Band of Chippewa	Tim Krohn Fond du Lac Land Information Manager	timothykrohn@fdlrez.com	Email
At time of announcement	Northeastern States DO	NGO	Friends of the Boundary Waters	Betsy Daub	betsy@friends-bwca.org	Email
At time of announcement	Northeastern States DO	NGO	Save the Boundary Waters	Becky Rom	rebecca.rom49@gmail.com	Email
At time of announcement	Northeastern States DO	NGO	Save the Boundary Waters	Rachel Garwin	rachel@savetheboundarywaters.org	Email
At time of announcement	Northeastern States DO	NGO	Save the Boundary Waters	Jeremy Drucker	jeremy@savetheboundarywaters.org	Email
At time of announcement	Northeastern States DO	NGO	Downstream Business Coalition		downstreambusinesscoalition@gmail.com	Email

Commented [WBS2]: 3 tribes are key stakeholders

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Twin Metals Talking Points

- (b) (5) DPP [redacted]

- [redacted]
  - [redacted]

- [redacted]
  - [redacted]
  - [redacted]
  - [redacted]

- [redacted]

AMERICAN OVERSIGHT

From: Benedetto, Kathleen
To: awilliamson@twin-metals.com
Subject: Comment Letter
Date: Tuesday, February 6, 2018 4:03:16 PM
Attachments: MAFP Comment Letter.pdf
Sulfide Mining and Human Health in Minnesota.pdf

--
Kathleen Benedetto
Senior Adviser
Bureau of Land Management
Room 5648, MIB
1849 C Street NW
Washington, DC 20240
Direct: (202) 208-5934
Cell: (202) 336-9318

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Deputy State Director of Geospatial Services
Bureau of Land Management Eastern States Office
20 M Street SE., Suite 950
Washington, DC 20003

US Forest Service
1400 Independence Ave. SW
Washington, DC 20250-0003
comments-eastern-superior@fs.fed.us

Connie Cummins
Forest Service Supervisor
ATT: Minerals Withdrawal
Superior National Forest
8901 Grand Ave.
Duluth, MN 55808-1122

May 8th, 2017

Dear U.S. Forest Service ("USFS") and Bureau of Land Management ("BLM") -

This letter is submitted on behalf of the undersigned Minnesota physicians and allied healthcare professionals, medical students, scientists, and groups. We strongly support the proposal by the U.S. Forest Service to withdraw approximately 234,328 acres of National Forest System lands for a 20-year period within the Rainy River Watershed in our state. The threats posed by sulfide-ore copper-nickel mining are unjustifiable in the water-rich environment throughout northeastern Minnesota. Many concerns, including concerns to human health, are posed by this form of mining in the Boundary Water Canoe Area (BWCA) watershed.

The World Health Organization lists the ten environmental toxins with greatest concern to human health. We know that sulfide ore mining releases at least six of these including mercury, lead, arsenic, asbestos, particulate air pollution and cadmium. These toxins have known

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harmful effects to human health including cancer, lung disease, heart disease, and neurodevelopmental disease. This type of mining also releases sulfates that fuel the sulfate-reducing bacteria in the sediment to methylate mercury already present in the environment to its toxic form of methylmercury, a known neurodevelopmental toxin. Given the geology and chemistry involved with sulfide ore containing rock and the sulfide mineral oxidation that occurs as part of the mining process, we know that ongoing leaching of toxic metals from mine ore and waste rock will very likely continue for centuries and inevitably make their way into surrounding water, soil, fish, wildlife, and eventually humans.

Because of the toxic reality of this industry, we as healthcare professionals, scientist, and future physicians have strongly and collectively voiced our concern in relation to sulfide mining within our water-rich borders. The Minnesota Medical Association, Minnesota Academy of Family Physicians, Minnesota Nurses Association, Minnesota Public Health Organization along with dozens of individual providers, and non-profit groups with ties to human health all submitted letters in response to the one prior Environmental Impact Statement (EIS) done for sulfide ore mining in Minnesota. The consensus by all of these groups representing thousands of healthcare professionals in our state is that a comprehensive Health Risk Assessment (HRA) and Health Impact Assessment(HIA) be mandated as part of an EIS necessary for decisions regarding sulfide mining. In addition to this, the Minnesota Academy of Family Physician (the largest medical specialty organization in our state) passed a resolution which was brought to the state Environmental Quality Board as a petition for rulemaking to REQUIRE that an HIA be completed for all future sulfide mining projects in Minnesota. This petition is currently being considered by the EQB and is pending vote.

The National Environmental Policy Act (NEPA) requires that "all agencies of the Federal Government shall...include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official." (NEPA Sec 102 [42 USC S 4332]). The Committee on Health Impact Assessment convened by the National Resource Council has declared that: "...the appropriate assessment of direct, indirect, and cumulative health effects in EIA under NEPA is a matter of law and not discretion...Because the steps and approaches of HIA and EIA are compatible, HIA offers an appropriate way to meet the requirement for health analysis under NEPA and related state laws..." (Improving Health In the United States: The Role of Health Impact Assessment The National Academies Press Washington, D.C. 2011 P.12)

We are asking that the Forest Service and Bureau of Land Management include an INDEPENDENT and scientifically RIGOROUS and COMPREHENSIVE Health Risk Assessment and Health Impact Assessment as part of an EIS for this project within the Rainy River watershed. We also ask that the HRA/HIA specifically look at health risks to:

- Those who live in downstream communities including Stony River, Morse and Fall Lake Townships.
- All individuals who will utilize the BWCA and surrounding wilderness, drinking unfiltered water straight out of the lakes downstream of these mining activities.

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- Fetuses, infants and children, those most vulnerable to the deleterious effects of methylmercury.
- Low-income and tribal communities who rely on hunting, fishing and gathering of wild rice and other plants for their subsistence and cultural well-being.

We would also ask that the HRA/HIA:

- Assess cumulative mercury risks, including hazard levels in bodies of water that may already be impaired for mercury in fish.
- Assess cancer and non-cancer risks to future on-site workers including risks due to metals, dust, particulates and other emissions.
- Assess health risks resulting from fossil fuel combustion, including impacts of burning coal to meet energy demands.
- Assess cumulative risks of multiple chemicals.
- Assess noise pollution to surrounding wilderness.

Research suggests that 60% of our health is determined by environmental and social conditions and behaviors, referred to in public health as the social determinants of health. We thus also ask for analysis of the long-term potential costs of sulfide mining with a broadly scoped Health Impact Assessment that rigorously scrutinizes the social determinants of health in this sensitive and unique region of our state. These costs would include but would not be limited to:

- The cost for health care, special education, loss productivity resulting from potential human health impairments.
- The cost and capability of increasing mental health providers in this region to meet increasing needs, a region that currently has inadequate number of mental health professionals and facilities to meet even the current needs.
- The cost of potential loss of the pristine wilderness that serves as a source of mental and spiritual health not only for the local region, but for countless individuals across our state and nation.
- The cost of potential erosion of the pristine wilderness that has sustained an outdoor recreation industry in Minnesota that contributes to a stable tax base, jobs in a range of sectors, and the retention and talent and wealth in Minnesota.

We thank you for considering the concerns of Minnesota physicians and allied healthcare professionals, scientists, and future physicians as you continue to evaluate this issue. We hope that you share our commitment to using careful assessment and rigorous science to understand potential health risks as well as the affects to the social determinants of health. We have included a link as well as a copy of a recent medical article entitled: Sulfide Mining and Human Health in Minnesota.
http://pubs.royle.com/publication/?i=352462 (p. 51-55)
We urge you to do everything in your power to help protect the health of current and future generations throughout Minnesota.

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Sincerely,

Minnesota Academy of Family Physicians (MAFP)- *representing more than 3100 family physicians, residents and medical students, the MAFP is the largest medical specialty organization in Minnesota*

Individual signers:
Jen Pearson, MD; Family Practice, Duluth
Peg Sutherland, MD; Child and Adolescent Psychiatry, Duluth
Emily Onello, MD; Family Practice, Duluth
Debbie Allert, MD; Family Practice, Two Harbors
Kris Wegerson, MD; Family Practice, Duluth and Ashland
John Ipsen, MD; Family Practice, Duluth and Ashland
Sue Nordin, MD; Family Practice, Duluth
Jeffrey D. Rome, MD; Rochester
David Daniels, MD PhD; Neurosurgery, Rochester
Dave Bucher, MD; Family Practice, President of MAFP
Nancy Sudak, MD; Family Practice, Duluth
Stephen B. Erickson, MD; Rochester
Raymond Christensen, MD; Family Physician, Moose Lake
Steven Long, MD; Family Practice, Duluth
Jim Hart, MD; General Internal Medicine (retired), Stillwater
Vicki Andrews, FNP; Duluth
Sarah Nelson, MD; Duluth
Douglas Hoffman, MD; Orthopedics and Radiology, Duluth
Christine Swensen, MD; Family Practice, Duluth
Kenneth W. Schroeder, MD PhD; Gastroenterology, Rochester
Bruce D Snyder, MD FAAN; Neurology
John Wood, MD; Family Medicine, Duluth
Jamie Harvie; Executive Director Institute for a Sustainable Future
Michael McGoon, MD; Retired Cardiologist, Rochester
Roger L. Nelson, MD; Rochester
Judith Derauf, RN; Duluth
Nicholas F LaRusso, MD; Rochester
Bill Mittlefehldt; Sustainability Consultant with Cross Currents
Steve Bauer, MD; Child and Adolescent Psychiatrist and Medical Director of the Community Mental Health Centers for the Arrowhead region
William Anthony Smithson, MD, JD; (retired) Pediatric Oncology, Rochester
Glen Sorenson; Science Educator, Fond du lac Tribal Community College
Anthony Stans, MD; Rochester
Anne Rogotzke, MD; Obstetrics and Gynecology, Duluth
Bruce Derauf, MD; Radiology Duluth
David R. Daugherty, MD; Rochester
Gail Amundson, MD; Healthcare Transformation Consultant LLC, St. Paul

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Nathan Ratner, MS2; University of MN Medical School Duluth campus
Todd A. Milbrandt, M.S, MD; Pediatric Orthopaedics, Rochester
Emily Davis, MS2; University of MN Medical School Duluth campus
Barbara C. Chamberlin, MD; Rochester MN
Rodger Nelson, MD; Rochester
Chi Tran, BSN student; Univ. of MN
Mike Menzel, MD; Edina
David G. Piepgras, MD; Rochester
Phillip Peterson, MD; Internal Medicine, Minneapolis
Sam Stokes Cerkvenik, MS1; University of MN Medical School Duluth campus
William A. Toscano, Ph.D., Dr. (hs), FAAAS; Minneapolis
Miranda Bridgeman, BA; Master of Nursing Student, Morris
Enna Schluter, RN; Stacey
Jesse Wilder, nursing student
Susan McKane, RN; St. Paul
Teddie Potter PhD, RN, FAAN
Eva Pesch, MD; Family Medicine Physician
Steven Sutherland, MD; Child and Adolescent Psychiatry, Duluth
Jessica Fisher, RN, BSN, CCTN; DNP student in Adult/Gerentological Primary Care
Rebecca Beese, BSN, RN; Psychiatric/Mental Health Nurse Practitioner, Minneapolis
Federico Rossi, MD; Minnesota Gastroenterology
David C. Anderson, MD; Neurology, Minneapolis
Andrew Jameton, PhD; Professor in College of Public Health, Nebraska and St. Paul
Eric Trehus, M.D
James Conniff, MD, MPH; Family Physician, Duluth
Frederick R. Taylor, MD FAAN FAHS; Neurology, Minneapolis
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Sulfide Mining and Human Health in Minnesota

BY EMILY ONELLO, MD, DEB ALLERT, MD, STEVE BAUER, MD, JOHN IPSEN, MD, PHD, MARGARET SARACINO, MD, KRIS WEGERSON, MD, DOUGLAS WENDLAND, MD, MPH, AND JENNIFER PEARSON, MD

Sulfide mining (specifically copper-nickel sulfide mining) represents a significant departure from Minnesota's iron mining tradition. Sulfide mining can produce acid waste and sulfates that mobilize the release of heavy metals into the environment. These metals include known neurotoxins such as lead and mercury. Mining activities also create airborne fibers and pollutants that can contribute to increased morbidity. The short- and long-term effects of exposure to these substances on human health should be considered in present and future sulfide mining proposals. In addition, Minnesota physicians need to understand the potential adverse mental and physical health effects of sulfide mining on mine workers and residents of communities near mining operations.

The Duluth Complex is a geological formation that contains deposits of copper, nickel and palladium group metals. It is located at the eastern end of the Mesabi Iron Range in northeastern Minnesota.[1] PolyMet Mining plans to build an open-pit mine in the northeastern part of the state to recover those valuable metals. Other mining companies are also exploring mineral deposits and preparing proposals for extracting them.

During the past three years, multiple organizations representing health care professionals have voiced concern about the potential effects of copper-nickel mining on human health. The Minnesota Medical Association, Minnesota Public Health Association, Minnesota Nurses Association and Minnesota Academy of Family Physicians have each endorsed deeper inquiry into the potential health effects of sulfide mining, and specifically of copper-nickel mining. Although the majority of debates about sulfide mining in our state have been framed as "environment versus jobs," the impact on human health needs to be a part of these discussions.

Sulfide mining has significant potential for the release of toxic chemicals into the environment. These include a number of chemicals identified by the World Health Organization as being of major public health concern: arsenic, asbestos, cadmium, lead and mercury.[2] Given this ominous list, and the possible synergistic effects of co-exposure to more than one of these chemicals, it is important that physicians understand why concerns are being raised about this type of mining.

FIGURE 1

Metal sulfide oxidation sequence using pyrite as an example

Pyrite (FeS_2) is exposed to air (O_2) and water (H_2O)

A sequence of reactions occur creating sulfate, ferric hydroxide and hydrogen ions.

Additional chemical reactions occur involving pyrite, iron sulfate and water, resulting in the release of sulfuric acid.

Sulfuric acid promotes release of other metals from rock and causes harm to aquatic ecosystems.

Source: Jacobs JA, Lehr JH, Testa SM. Acid Mine Drainage, Rock Drainage and Acid Sulfate Soils: Causes, Assessment, Prediction, Prevention and Remediation. Hoboken, NJ: John Wiley & Sons; 2014

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How Acid Mine Drainage is Generated

Sulfide mining differs significantly from iron ore (taconite or ferrous) mining because it has the potential to generate acidic pH. Copper and nickel typically are bound to sulfur in rock. Because of this sulfur bond, they are described as sulfide minerals.[3] The chief iron-bearing minerals in iron mining are iron oxides and iron carbonate,[4] neither of which are sulfide minerals. Typical iron ore in Minnesota is relatively poor in sulfide minerals and contains minerals that actually buffer acid generation. Minnesota has not experienced large-scale release of toxic metals from iron mine waste into the environment.

However, both iron and sulfide mining operations do involve the excavation of millions of tons of rock in order to acquire a fractional amount of desired product. The ore is then processed to yield the desired metal. The surface mine site as well as mining wastes (overlying material, waste rock and "tailings"—fine-grained materials left over after the metals of interest are extracted) are exposed to moisture and atmospheric oxygen. When the sulfide mineral ore and wastes come into contact with air and water, chemical reactions occur that result in seepage of sulfuric acid, sulfate and toxic metals into surface and ground water. The general concept is as follows:

Metal sulfide + air + water →
Mobilized metal + salts + acid (including sulfuric acid)

An example of the metal sulfide reaction is outlined in Figure 1. It demonstrates how sulfuric acid is generated in the presence of unearthed sulfide mineral rock.

Copper-nickel ore frequently contains iron sulfide minerals such as pyrite (FeS_2), one of the world's most common sulfide minerals. The atmospheric oxidation of pyrite ultimately results in the release of sulfuric acid.[3] Under certain conditions, ferric iron (Fe^{3+}) remains soluble in acidic outflows and forms the reddish-orange to yellow ferric hydroxide ($Fe(OH)_3$), a precipitate often recognized as the hallmark of waters containing acid mine drainage[3] (Figure 2).

FIGURE 2

Acid mine drainage



PHOTO COURTESY U.S. GEOLOGICAL SURVEY

Iron hydroxide precipitating in a stream can be seen as the yellow-brownish discoloration sometimes referred to as "ochre" or "yellowboy."

Aqueous sulfuric acid is released into the surrounding environment and leaches heavy metals from the rock. The release of sulfuric acid and heavy metals into surface and ground water, and eventually into streams and lakes, is called "acid mine drainage." Many of the copper sulfide mines currently operating in the United States are located in the Southwest, a region that receives little rain and snow; thus, communication between surface and groundwater resources is limited. In wetter climates like Minnesota's, surface and shallow groundwater are more vulnerable to the negative effects of sulfide mining.[5]

Ore that contains commercially desired metals often contains other metals including mercury, lead and arsenic, which are similarly bound to sulfur. Studies of the Duluth Complex formation suggest that leachate will likely include copper, nickel, cobalt and zinc.[6]

By understanding the general concept of sulfide mineral oxidation (Figure 1), one can see how toxic metals are mobilized from solid rock into the environment and can generate sulfuric acid.[7] This reaction can result in ongoing leaching of metals from mine ore and waste rock, which can continue for centuries.

The Role of Microorganisms

Microorganisms are critical to acid mine drainage, as they accelerate the release of metals. These include extremophilic, sulfur-oxidizing and iron-oxidizing bacteria and archaea. One model organism is *Acidithiobacillus ferrooxidans*, which has been well-studied in the context of sulfide mining because it catalyzes ferrous iron to ferric iron. The regeneration of ferric iron exponentially increases the rate of breakdown of pyrite and sulfide minerals, increasing acid mine drainage.[3]

Select anaerobic microorganisms carry a gene that allows them to add a methyl group to inorganic mercury to create the most toxic form of mercury, methyl mercury. The environmental conditions that promote mercury methylation are complex and not completely understood, but they often are associated with bacterial sulfate reduction (anaerobic organisms that "breathe" sulfate as an alternative to oxygen).[8] Methylation occurs in the sediments, wetlands, ombrotrophic ("cloud fed") bogs and peat lands that are found in Minnesota's water-rich environment.[9]

Multiple variables affect the methylation reaction that creates methyl mercury including pH, temperature and concentrations of carbon, iron and sulfate. It appears that higher levels of sulfate (SO_4^{2-}) can enhance the rates of mercury methyla-

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tion because they can stimulate bacterial sulfate reduction.[8] Since acid mine drainage includes sulfate, it is important to understand that increases in sulfate can increase the amount of methylated mercury released into the environment, primarily when that sulfate stimulates bacterial sulfate reduction in anoxic environments.

Mercury Already an Issue in Minnesota

Mercury can be found in the air, sediment, water, soil and living organisms. Humans acquire mercury in two ways: by breathing gaseous mercury or ingesting methyl mercury, notably by eating fish and shellfish. Methyl mercury is found throughout fish tissue, including muscle, and is not removed by trimming the fat, avoiding certain parts of fish or using special cooking methods.[10] Figure 3 shows the sequence of events by which release of anthropogenic sulfate can result in increased mercury levels in fish.

Mercury contamination of fish is a significant public health concern in Minnesota because of its neurotoxicity. In 2011, the Minnesota Department of Health found that one out of 10 infants in Minnesota's Lake Superior region were born with unsafe levels of mercury in their blood.[11] Many of Minnesota's northern waters are already legally classified as impaired because of the presence of mercury in fish tissue. This predates any potential mercury increases resulting from acid mine drainage.

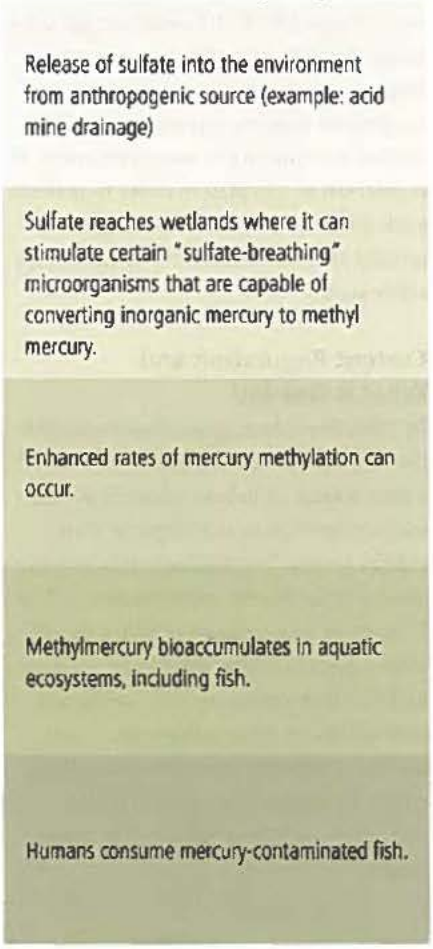
Precise predictions of methyl mercury increases that would result from an influx of sulfate caused by mining can be challenging. However, concern is warranted because fishing remains important to Minnesotans,[10] and fish is an important food source for both indigenous and non-indigenous residents. Rural and tribal residents may be at greater risk of mercury exposure than urban or suburban residents because of their higher rates of self-caught fish consumption.[12]

Mercury toxicity as a result of ingesting heavily contaminated fish can result in a range of neuropsychiatric issues including abnormal brain development and sensory distortions (paranoia and hallucinations). The developing brains of fetuses and children can experience the most profound and devastating consequences of exposure to mercury and other heavy metals.

Many illnesses of the brain and central nervous system are categorized as neurodevelopmental disorders. These include attention deficit hyperactivity disorder, learning disorders, autistic spectrum disorders, language disorders and intellectual disabilities. The causes of neurodevelopmental disorders are multifactorial, but the connection to exposures to heavy metals, particularly methyl mercury, is known.[13]

FIGURE 3

Connection between anthropogenic sulfate release and human mercury exposure



These conditions cannot be cured, and they come with significant personal, familial and societal costs. A small increase in incidence resulting from increased mercury exposure may result in large costs to society on a population level.[14] A recent consensus statement by Project TENDR issued a strong call for "recommendations to monitor, assess and reduce exposures to neurotoxic chemicals."[15]

Air Quality Considerations

The ore complex that contains copper, nickel and precious metals may also contain amphibole fibers. Amphibole fibers are often described as elongated mineral particles (EMPs). EMP fibers are crystals with similarities to asbestos. When ore is mined and processed, EMPs can be released. Currently, EMPs pose an uncertain risk to human health. Because of this uncertainty, longitudinal biomonitoring of people and communities exposed to EMPs is needed.

"Fugitive dust" is a term applied to dust that escapes mining operations. This can include dust that mining trucks generate on the road or dust that escapes as ore is transported in open train cars. Although levels may be difficult to quantify, fugitive dust may have health effects on both mineworkers and residents of nearby communities. Fossil fuel combustion, which is needed to generate electric power for mining, is another source of air pollution, the effects of which need to be considered.

Worker Exposures and Concerns

Safe workplace guidelines are important for people employed in the mining industry. Mine workers require protection from the airborne particulates and dust that are associated with mining operations. Sulfide mining, by virtue of its novel ore composition, presents new environmental safety questions.

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The Mine Safety and Health Administration (MSHA) oversees mine safety and releases guidelines for worker protection. MSHA-allowable exposure levels for airborne exposures other than to asbestos are tied to the 1973 American Conference of Governmental Industrial Hygienists (ACGIH) guidelines. The MSHA guidelines do not reflect current science on the health consequences of airborne exposures in mining. The National Institute of Occupational Health and Safety (NIOSH), MSHA and the Occupational Safety and Health Administration (OSHA) have all proposed reduction of the allowable exposure by 50% from the 1973 ACGIH guidelines. In order to better protect Minnesota's miners, the threshold for allowable airborne exposures should be based on more contemporary science. Both NIOSH and ACGIH have published more up-to-date recommendations.[16,17]

OSHA has published models for medical surveillance of workers exposed to a variety of chemical hazards. Because the Duluth Complex rock includes silicates and other minerals, characterization of the potential adverse chemical and mineral exposures for workers using Duluth Complex-derived rock is important. OSHA provides medical surveillance models for nearly 20 compounds; however, no single overarching medical surveillance recommendation exists for sulfide mining. Given the long latency for the appearance of mining-related health effects, establishment of medical surveillance programs should be considered in the planning of the mine project.

Planning for Unanticipated Events

Proposals for sulfide mining operations must describe how water quality will be preserved, but may not take into account the extent of extreme weather events. In Minnesota, we are experiencing more significant rain events.[18] In June 2012, for example, the northeastern part of the state received 10 inches of rain in 24 hours. Significant rainfall such as this may result in unintended escape of mining wastewater and accompanying toxins.

A 2015 study of tailings storage facility failures centering on those categorized as "serious" or "very serious" determined that such failures have increased over the last 20 years.[19] For example, in 2014, a British Columbia copper and gold mine tailings pond breach spilled over 6 billion gallons of waste and polluted water into the surrounding lakes and watershed. Such events underscore the need to plan for a catastrophic event involving sulfide mines.

Current regulations also require mining companies to provide plans for the closure of an operation; this involves continued water treatment using filters or reverse osmosis systems. Post-closure water treatment can be necessary for centuries. Equipment malfunctions, natural disasters, extended power outages or inadequate funding can create an unintended interruption in water treatment. It is essential to pre-plan in order to prevent such interruptions from contaminating ground and surface water and the human water supply.

Current Regulation and What is Needed

In 1969, the federal government enacted the National Environmental Policy Act, which directs all federal agencies to take into account the health impacts of all federal actions "significantly affecting the quality of the human environment."[20] The Minnesota Environmental Policy Act of 1973 directs "all department and agencies of the state government to … undertake, contract for or fund such research as is needed in order to determine and clarify effects by known or suspected pollutants which may be detrimental to human health."[21]

With these laws in mind, physicians might assume existing regulations will protect human health. The current mandated evaluations of mining proposals do address air and water quality impacts and toxin discharges. Yet the laws do not require a comprehensive, long-range examination of potential effects on health. For example, environmental reviews may scientifically model the amount of mercury that may be released into surface and ground water, but they do not answer questions about the potential effects on human health of that mercury as it accumulates in food sources.

The short- and long-term effects on human health should be considered in present and future sulfide mining proposals. Both the EPA's Health Risk Assessment (HRA) and Health Impact Assessment (HIA) can be used for this kind of evaluation. The HRA estimates the nature and probability of adverse health effects in humans who may be exposed to chemicals in contaminated environments now and in the future.[22] The HIA focuses on "health consequences of decisions upstream from health"[23] and can be defined as "a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program or project on the health of a population and the distribution of those effects within the population." The HIA provides recommendations on monitoring and managing those effects.[24] Incorporating an HRA and an HIA into the environmental review for a proposed sulfide mining project could enable a more informed, integrated and meaningful discussion of human health concerns.

Conclusion

Sulfide ore mining presents a significant departure from the traditional iron ore mining done in Minnesota. Because of our state's water-rich environment and

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the chemical composition of sulfide ore, proposed sulfide mining raises concern about potential deleterious effects on human health. Physicians must continue to educate themselves about the evolving interplay of mining operations and the health of the communities in which they practice. MM

Emily Onello and Jennifer Pearson are family physicians in Duluth. Deb Allert is a family physician in Two Harbors. Steve Bauer is a child and adolescent psychiatrist who practices in northeastern Minnesota. Margaret Saracino is a child and adolescent psychiatrist in Duluth. Kris Wegerson and John Ipsen are family physicians who practiced medicine in Duluth for more than 20 years and now practice in Odanah, Wisconsin. Douglas Wendland is an occupational medicine and family physician in Duluth.

The authors would like to thank Amy Seip and Caitlin Bakker for their valuable assistance in the preparation of this manuscript.

REFERENCES

1. Minnesota Department of Natural Resources, U.S. Army Corps of Engineers, U.S. Forest Service. Final Environmental Impact Statement (Final EIS) NorthMet Mining Project and Land Exchange. November 2015. Available at: www.dnr.state.mn.us/input/environmentalreview/polymet/feis-toc.html. Accessed October 21, 2016.

2. World Health Organization. Preventing disease through healthy environments: Action is needed on chemicals of major public health concern. Geneva: World Health Organization; 2010. Available at: www.who.int/ipcs/features/10chemicals_en.pdf?ua=1. Accessed October 6, 2016.

3. Jacobs JA, Lehr JH, Testa SM. Acid Mine Drainage, Rock Drainage and Acid Sulfate Soils: Causes, Assessment, Prediction, Prevention and Remediation. Hoboken, NJ: John Wiley & Sons; 2014.

4. Poveromo JJ. Iron ores. In: Wakelin DH, Fruehan RJ, eds. The making, shaping and treating of steel. 11th ed. Pittsburgh, PA: The AISE Steel Foundation; 1999:547-642.

5. Earthworks. Copper sulfide mining. Available at: www.earthworksaction.org/issues/detail/copper_sulfide_mining#.V-QzapMrJBx. Accessed August 14, 2016.

6. Lapakko KA, Olson MC, Antonson DA. Dissolution of Duluth Complex Rock from the Babbitt and Dunka Road Prospects: Eight-year laboratory experiment Report. Available at: http://files.dnr.state.mn.us/lands_minerals/reclamation/mndnr_dc_wasterock_2013.pdf. Minnesota Department of Natural Resources, St. Paul. June 2013. Accessed September 23, 2016.

7. Jambor JL, Blowes DW, Ritchie AM. Environmental aspects of mine wastes. Ottawa, Ont.: Mineralogical Association of Canada; 2003.

8. Jeremiason JD, Engstrom DR, Swain EB, et al. Sulfate addition increases methylmercury production in an experimental wetland. Environ Sci Technol. 2006;40(12):3800-6.

9. Branfireun BA. Of the NorthMet mining project and land exchange: Final environmental impact statement 2015. Expert Report. Availabel at: http://waterlegacy.org/sites/default/files/u42412/Branfireun_Expert_Opinion_PolyMet_FEIS_(FinalDraftDec.2,2015)(1).pdf. Accessed August 14, 2016.

10. Minnesota Department of Health. Minnesota fish: Benefits and risks. Available at www.health.state.mn.us/divs/eh/fish/faq.html. Accessed September 22, 2016.

11. McCann P. Mercury levels in blood from newborns in the Lake Superior Basin (GLNPO ID 2007-942). Final Report. November 30, 2011. Available at: www.health.state.mn.us/divs/eh/hazardous/topics/studies/glnpo.pdf. Accessed August 16, 2016.

12. Gochfeld M, Burger J. Disproportionate exposures in environmental justice and other populations: The importance of outliers. Am J Public Health. 2011;101 Suppl 1:S53-63.

13. Grandjean P, Landrigan PJ. Neurobehavioural effects of developmental toxicity. Lancet Neurol. 2014;13(3):330-8.

14. Trasande L, Landrigan PJ, Schechter C. Public health and economic consequences of methyl mercury toxicity to the developing brain. Environ Health Perspect. 2005;113(5):590-6.

15. Bennett D, Bellinger DC, Birnbaum LS, et al. Project TENDR: Targeting environmental neurodevelopmental risks the TENDR consensus statement. Environ Health Perspect. 2016;124(7):A118-22.

16. The NIOSH Pocket Guide to Chemical Hazards online update April 11, 2016. Available at: www.cdc.gov/niosh/npg/default.html. Accessed October 13, 2016.

17. 2016 Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices. ACGIH Signature Publications. Cincinnati, OH

18. Minnesota Department of Health. Minnesota climate and health profile report 2015: An assessment of climate change impacts on the health & well-being of Minnesotans. Profile Report. Available at: www.health.state.mn.us/divs/climatechange/docs/mnprofile2015.pdf. Accessed September 22, 2016.

19. Bowker LN, Chambers DM. The risk, public liability and economics of tailings storage facility features. Available at: www.earthworksaction.org/files/pubs-others/BowkerChambers-RiskPublicLiability_EconomicsOfTailingsStorageFacility%20Failures-23Jul15.pdf. Accessed September 22, 2016.

20. 42 U.S.C. Sec. 4321 et seq

21. Minnesota Statutes Sec. 116D.01 et seq.

22. Environmental Protection Agency: Human health risk assessment. Available at: www.epa.gov/risk/human-health-risk-assessment. Accessed September 26, 2016.

23. Goldman LR. Prevention in environmental health. In: Frumkin H, ed. Environmental health: From global to local. 2nd ed. San Francisco, CA: Jossey-Bass; 2010:973.

24. National Research Council (US) Committee on Health Impact Assessment. Improving health in the United States: The role of health impact assessment. Washington, DC: The National Academies Press, 2011.

EMPLOYMENT OPPORTUNITIES



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DOI-(BLM)-19-0291, 19-0538-D-000039

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From:	Elser, Lesley
To:	Jermaine Moore; Mitchell Leverette; Davida Carnahan; Barbara Eggers; Sally Spencer
Subject:	Due COB today - For ESO/320 Review (COB 10/16): Rep. Emmer"s introduced bill technical review H.R. 3905, TMM
Date:	Wednesday, October 18, 2017 1:17:37 PM
Attachments:	BILLS-115hr3905ih.pdf RepEmmerMNMinerals_legislationCompare100617.docx H.R.__RepEmmerMN-TwinMetals_HR3905ANALYSIS_101217_toProgramsStates.docx hearing_memo_--_leg_hrg_on_discussion_draft_rep._emmer_07.27.17_2.pdf

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Legislative Affairs is wanting Mitch to sign off on Rep. Emmer's bill today. The information is in the preceding email.

Lesley Elser

External Affairs, Eastern States

20 M Street SE

Washington, D.C. 20003-3503

Desk: (202) 912-7711

Email: laelser@blm.gov

---------- Forwarded message ----------
From: **Finch, Kimberly** <kfinch@blm.gov>
Date: Wed, Oct 18, 2017 at 1:05 PM
Subject: Fwd: For ESO/320 Review (COB 10/16): Rep. Emmer's introduced bill technical review H.R. 3905, TMM
To: laelser@blm.gov

Hi Lesley,

Below are the email and documents that I'm waiting on ESO review. I have also attached a hearing memo which expresses what the congressman hopes to do and references the pending court case. Thank you!

Kimberly Finch
Legislative Affairs
Bureau of Land Management
Email: kfinch@blm.gov
Office: 202-912-7430
Cell: 385-249-0699

Adam,

Rep. Emmer notes in his hearing memo that there is a pending court case on the TMM leases. Can you verify/provide background on this. Wouldn't a pending court case impede BLM from immediately issuing the leases if the bill was enacted?

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"Before this can occur, a pending court case between the federal government and the project owners will need to be resolved to determine the status of the project owner's mineral rights."

---------- Forwarded message ----------
From: **Finch, Kimberly** <kfinch@blm.gov>
Date: Thu, Oct 12, 2017 at 12:40 PM
Subject: For ESO/320 Review (COB 10/16): Rep. Emmer's introduced bill technical review H.R. 3905, TMM
To: Alfred Elser <aelser@blm.gov>, "Grange, Stuart" <sgrange@blm.gov>, Mitchell Leverette <mleveret@blm.gov>, Bradford Purdy <bpurdy@blm.gov>
Cc: Meagan Gins <mgins@blm.gov>, Jill Ralston <jralston@blm.gov>, Patrick Wilkinson <p2wilkin@blm.gov>, Andrea Nelson <anelson@blm.gov>

Hi ESO/WO-320,

Thanks again for all your time and attention regarding Rep. Emmer's draft bill for mineral leasing in MN. On Oct. 2, Emmer introduced a new version of the bill (H.R. 3905), and OCL asked us to finalize our review on the introduced version, and not the discussion draft. I asked DOI-SOL to review the draft bill and our previously cleared analysis. SOL flagged a few conflicts in the legislation, which you will see in the tech review section.

Pasted below and attached is a new draft summary/analysis. Please review in track changes by **COB 10/16**. I asked WO-210 for their input on the new NEPA section, and they stated that there are no mandated timelines associated with an EA; however, you may be aware of other regulations or other requirements (e.g. litigation) impeding the issuance of an EA for TMM in 30 days.

This is not a request for a proposed position statement(s) at this time; however, a legislative referral will be forthcoming, with an extended deadline.

Attached:

- Draft BLM analysis of H.R. 3905
- H.R. 3905 as introduced
- Comparison doc between draft bill and HR 3905

DOI Technical Assistance Request
BLM Review
H.R. 3905, Minnesota's Economic Rights in the Superior National Forest Act
Rep. Emmer (R-MN-6)

Rep. Emmer (R-MN-6) requested that the Department of the Interior (DOI) provide technical assistance on a draft bill regarding mineral leasing, mineral withdrawals, and national monuments on National Forest System (USFS) lands in the State of Minnesota. On Oct. 2, 2017, Rep. Emmer introduced H.R. 3905, Minnesota's Economic Rights in the Superior National Forest Act, with new language. The following is a technical review of the introduced bill, H.R. 3905.

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H.R. 3905 Summary

H.R. 3905 changes renewal and suspension of operations terms for all current and future mineral leases. Under H.R. 3905, all mineral leases in Minnesota, and specifically the MNES-01352 and MNES-01353 leases (Twin Metals Minnesota, LLC (TMM)), would be indeterminate preference right leases for terms of 20 years, subject to 10-year renewal periods, with certain adjustments allowed by the Secretary of the Interior (Secretary) and/or Secretary of Agriculture. The Secretary could only suspend mineral leases on USFS lands in Minnesota if the lessee(s) were operating at a loss due to market conditions, or if strikes interrupted operations. All leases would be subject to NEPA, and the BLM would be required to complete the environmental assessment for the TMM leases, no later than 30 days after the enactment of the act.

In addition to changing mineral leasing, the bill would amend the Antiquities Act for USFS lands in Minnesota to require Congressional authorization of national monument designations. Under H.R. 3905, all current and future mineral withdrawals on USFS lands in Minnesota would require congressional approval, rather than Secretarial approval. Finally, the proposed legislation does not apply to prospecting or developing minerals in the Boundary Waters Canoe Area Wilderness.

BLM Technical Review

The Bureau of Land Management (BLM) believes that the discussion draft, as written, would accomplish many of the sponsor's goals, but has a few suggestions for consideration.

We believe the sponsor seeks to change the U.S. Forest Service's (USFS) authority to consent to mineral leasing in Minnesota. As written, we believe that Section 4 would not accomplish the sponsor's goal of requiring consultation only, over consent. If the sponsor's intent is to minimize USFS involvement from consent to consultation, the existing statues (the Act of June 30, 1950 (16 USC 508b), and section 402 of Reorganization Plan No. 3 of 1946 (5 U.S.C. App.)) authorizing consent would still likely be in conflict with H.R. 3905, because the bill has not amended those statutes.

If enacted, H.R. 3805 would require the DOI to update regulations regarding indeterminate leases and preference right leases in order to conform with the bill.

Section 4 would be inconsistent with BLM's regulations regarding indeterminate leases. Under 43 CFR Part 3500, indeterminate leases are not subject to renewal. H.R. 3905 creates indeterminate leases that are subject to renewal. A renewal implies that a lessee would have to submit an application for renewal; whereas, an indeterminate lease continues indefinitely subject to periodic readjustments. For reference, under 43 CFR 3514.25(a) "hardrock mineral leases expire at the end of the lease term."

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Under current regulations, the BLM only issues preference right leases to holders of prospecting permits if the permittees discover a valuable mineral deposit. Known mineral deposits are subject to competitive leasing.

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115TH CONGRESS
1ST SESSION

H. R. 3905

To require congressional approval of any mineral withdrawal or monument designation involving the National Forest System lands in the State of Minnesota, to provide for the renewal of certain mineral leases in such lands, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 2, 2017

Mr. EMMER (for himself, Mr. PETERSON, and Mr. LEWIS of Minnesota) introduced the following bill; which was referred to the Committee on Natural Resources

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A BILL

To require congressional approval of any mineral withdrawal or monument designation involving the National Forest System lands in the State of Minnesota, to provide for the renewal of certain mineral leases in such lands, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Minnesota's Economic Rights in the Superior National Forest Act''.

AMERICAN OVERSIGHT

SEC. 2. CONDITION ON MINERAL WITHDRAWAL OF NATIONAL FOREST SYSTEM LANDS IN MINNESOTA.

Minerals within the National Forest System lands in the State of Minnesota shall not be subject to withdrawal from disposition under United States mineral and geothermal leasing law unless the withdrawal is specifically approved by an Act of Congress enacted after the date of the enactment of this Act.

SEC. 3. CONDITION ON MONUMENT DESIGNATION ON NATIONAL FOREST SYSTEM LANDS IN MINNESOTA.

Section 320301 of title 54, United States Code, is amended by adding at the end the following new subsection:

''(e) LIMITATION ON EXTENSION OR ESTABLISHMENT OF A NATIONAL MONUMENT IN MINNESOTA.—No extension or establishment of national monuments on National Forest System lands in the State of Minnesota may be undertaken except by express authorization of Congress.''.

SEC. 4. CLARIFYING THE NATURE OF MINERAL RIGHTS ON FOREST SYSTEM LANDS IN MINNESOTA.

(a) MINERAL LEASES ISSUED WITHIN FOREST SYSTEM LANDS IN MINNESOTA.—

AMERICAN OVERSIGHT

DOI-(BLM)-19-0291, 19-0538-D-000046

(1) IN GENERAL.—All mineral leases issued within the exterior boundaries of National Forest System lands in the State of Minnesota under the authority of the Act of June 30, 1950 (16 U.S.C. 508b), or section 402 of Reorganization Plan No. 3 of 1946 (5 U.S.C. App.), are indeterminate preference right leases that—

(A) shall be issued for an initial 20-year period; and

(B) as provided in paragraph (2), shall be renewable after the period described in subparagraph (A) for 10-year renewal periods.

(2) REQUIREMENTS FOR RENEWAL.—A lease shall be renewed under paragraph (1)(B)—

(A) if the lessee has complied with the terms and conditions of the lease during the preceding lease period; and

(B) on the condition that, at the end of each ten-year renewal period, such reasonable readjustment of the terms and conditions of the lease may be prescribed by the Secretary of the Interior, in consultation with the Secretary of Agriculture, for the purpose of—

(i) encouraging production; or

AMERICAN OVERSIGHT

DOI-(BLM)-19-0291, 19-0538-D-000047

(ii) addressing changing conditions within the lease area.

(b) SUSPENSION OF OPERATIONS.—The Secretary of the Interior may suspend operations under a lease described in subsection (a) when—

(1) the lease can only be operated at a loss due to market conditions; or

(2) operations are interrupted by strikes.

(c) PERMITS FOR USE OF SURFACE LANDS.—With respect to lands subject to a lease pursuant to subsection (a), the Secretary of the Interior, in consultation with the Secretary of Agriculture, may issue permits for the use of surface lands not included in the lease for purposes connected with, and reasonably necessary to, the exploration, development, and use of the deposits covered by the lease.

(d) APPLICABILITY TO MINERAL LEASES.—This section shall apply with respect to all mineral leases described in subsection (a), including—

(1) leases that on the date of the enactment of this section are not in effect; and

(2) the hard rock mineral leases for the Superior National Forest in Minnesota identified as MNES–01352 and MNES–01353.

(e) APPLICABILITY OF NATIONAL ENVIRONMENTAL POLICY ACT OF 1969.—The National Environmental Pol-

AMERICAN OVERSIGHT

DOI-(BLM)-19-0291, 19-0538-D-000048

icy Act of 1969 (42 U.S.C. 4331 et seq.) shall apply with respect to a mineral lease described in subsection (a). In the case of the renewal of the existing hard rock mineral leases referred to in subsection (d)(2), the Bureau of Land Management shall complete the pending environmental assessment no later than 30 days after the date of the enactment of this Act.

(f) EXCLUSION OF BOUNDARY WATERS CANOE AREA WILDERNESS.—Nothing in this section may be construed as permitting the prospecting for development and utilization of mineral resources within the Boundary Waters Canoe Area Wilderness or Mine Protection Area.

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AMERICAN OVERSIGHT

DOI-(BLM)-19-0291, 19-0538-D-000049

DOI Technical Assistance Request
BLM Review
H.R. 3905, Minnesota's Economic Rights in the Superior National Forest Act
Rep. Emmer (R-MN-6)

Rep. Emmer (R-MN-6) requested that the Department of the Interior (DOI) provide technical assistance on a draft bill regarding mineral leasing, mineral withdrawals, and national monuments on National Forest System (USFS) lands in the State of Minnesota. On Oct. 2, 2017, Rep. Emmer introduced H.R. 3905, Minnesota's Economic Rights in the Superior National Forest Act, with new language. The following is a technical review of the introduced bill, H.R. 3905.

H.R. 3905 Summary

H.R. 3905 changes renewal and suspension of operations terms for all current and future mineral leases. Under H.R. 3905, all mineral leases in Minnesota, and specifically the MNES-01352 and MNES-01353 leases (Twin Metals Minnesota, LLC (TMM)), would be indeterminate preference right leases for terms of 20 years, subject to 10-year renewal periods, with certain adjustments allowed by the Secretary of the Interior (Secretary) and/or Secretary of Agriculture. The Secretary could only suspend mineral leases on USFS lands in Minnesota if the lessee(s) were operating at a loss due to market conditions, or if strikes interrupted operations. All leases would be subject to NEPA, and the BLM would be required to complete the environmental assessment for the TMM leases, no later than 30 days after the enactment of the act.

In addition to changing mineral leasing, the bill would amend the Antiquities Act for USFS lands in Minnesota to require Congressional authorization of national monument designations. Under H.R. 3905, all current and future mineral withdrawals on USFS lands in Minnesota would require congressional approval, rather than Secretarial approval. Finally, the proposed legislation does not apply to prospecting or developing minerals in the Boundary Waters Canoe Area Wilderness.

BLM Technical Review

The Bureau of Land Management (BLM) believes that the discussion draft, as written, would accomplish many of the sponsor's goals, but has a few suggestions for consideration.

We believe the sponsor seeks to change the U.S. Forest Service's (USFS) authority to consent to mineral leasing in Minnesota. As written, we believe that Section 4 would not accomplish the sponsor's goal of requiring consultation only, over consent. If the sponsor's intent is to minimize USFS involvement from consent to consultation, the existing statues (the Act of June 30, 1950 (16 USC 508b), and section 402 of Reorganization Plan No. 3 of 1946 (5 U.S.C. App.)) authorizing consent would still likely be in conflict with H.R. 3905, because the bill has not amended those statutes.

If enacted, H.R. 3805 would require the DOI to update regulations regarding indeterminate leases and preference right leases in order to conform with the bill.

AMERICAN OVERSIGHT

Section 4 would be inconsistent with BLM's regulations regarding indeterminate leases. Under 43 CFR Part 3500, indeterminate leases are not subject to renewal. H.R. 3905 creates indeterminate leases that are subject to renewal. A renewal implies that a lessee would have to submit an application for renewal; whereas, an indeterminate lease continues indefinitely subject to periodic readjustments. For reference, under 43 CFR 3514.25(a) "hardrock mineral leases expire at the end of the lease term."

Under current regulations, the BLM only issues preference right leases to holders of prospecting permits if the permittees discover a valuable mineral deposit. Known mineral deposits are subject to competitive leasing.

AMERICAN OVERSIGHT

Subcommittee on Energy and Mineral Resources
Paul Gosar, Chairman
Hearing Memorandum

July 25, 2017

To: All Subcommittee on Energy and Mineral Resource Subcommittee Members

From: Majority Committee Staff, Chris Esparza (x5-9297)
Subcommittee on Energy and Mineral Resources

Hearing: **Discussion Draft on H.R. ___ (Rep. Tom Emmer)**, To require congressional approval of any mineral withdrawal or monument designation involving the National Forest System lands in the State of Minnesota, to provide for the renewal of certain mineral leases in such lands, and for other purposes.
July 27, 2017 at 10:00 AM; 1324 Longworth HOB

Summary of the Bill

The bill would require congressional approval to withdraw any minerals on National Forest System (NFS) lands in the State of Minnesota from disposition under U.S. mineral and geothermal leasing laws. The bill further requires congressional approval for the establishment of national monuments on NFS lands in the State of Minnesota. Finally, the bill clarifies the lease terms for all mineral leases within the exterior boundaries of NFS lands in the State of Minnesota.

Invited Witnesses

Panel I

The Honorable Tom Emmer
Member of Congress
Minnesota's 6th Congressional District

Panel II

Ms. Nancy Norr
Director, Regional Development
Minnesota Power, an ALLETE Company

Professor Drew Shindell
Nicholas Professor of Earth Sciences
Nicholas School of the Environment, Duke University

AMERICAN OVERSIGHT

Background

The Twin Metals Minnesota Project is a prospective underground copper, nickel, platinum, palladium, gold and silver mine operation.[1] The world-class Maturi mineral deposit is located near the cities of Ely, and Babbitt, Minnesota in the Superior National Forest. Project proponents seek to submit a formal mine plan proposal and formally begin detailed environmental reviews required by state and federal laws. Before this can occur, a pending court case between the federal government and the project owners will need to be resolved to determine the status of the project owner's mineral rights.[2]

The Twin Metals project is expected to extract 20,000 tons of mineralized ore per day from which marketable concentrates are produced.[3] This project is expected to create 650 direct and 1,300 indirect jobs.[4] In 2015 the average wage for a mining job in Minnesota was $78,635, while the average wage in Minnesota was $53,938.[5] If approved, the project will generate significant tax and royalty revenues for Minnesota.

The Twin Metals project would consist of an underground operation and a tailings storage facility.[6] The mined out workings of the mine would serve as permanent storage for waste rock and tailings. This would minimize surface storage of these byproducts. Sufficient underground space would be created to contain 100% of the produced waste rock and 50% of the processed tailings. The other 50% will be deposited in a surface tailings storage facility.[7] This facility is expected to be located at an existing mine near Babbitt, Minnesota.

Unlike most mineral operations on federal lands, which are governed by the Mining Law of 1872 (30 U.S.C.), the Weeks Act (16 U.S.C. 521a), which deals with acquired lands and minerals, controls the Twin Metals Project.[8] Leases of acquired minerals on federal land for mineral exploration and extraction are not indefinite agreements and periodically need to be renewed on 20-year increments. The two leases for the mineral deposit in question began in 1966 and were renewed both in 1989 and 2004.[9] These leases have been transferred several times, most recently by Antofagasta, a Chilean mining corporation. Upon acquisition, Antofagasta took a renewed interest in exploratory and design activities, spending more than $400 million in developing the Twin Metals.[10]

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[1] Twin Metals Minnesota, About the Project, http://www.twin-metals.com/about-the-project/.
[2] Steve Karnowski, Feds seek to dismiss Twin Metals mineral rights lawsuit, StarTribune, June 6, 2017, http://www.startribune.com/feds-seeks-to-dismiss-twin-metals-mineral-rights-lawsuit/426796791/.
[3] Twin Metals Minnesota, Project Facts, http://www.twin-metals.com/about-the-project/project-facts/.
[4] *id.*
[5] *id.*
[6] *id.*
[7] *id.*
[8] Complaint, *Franconia Minerals v. U.S. Dep't of the Interior*, Filed Sept. 12, 2016 (Dist. MN).
[9] *id.*
[10] Twin Metals Minnesota, *supra*, note 3.

AMERICAN OVERSIGHT

However, the previous administration denied Antofagasta's recent application to renew its leases, premising the denial on an opinion (M-Opinion) by then-Interior Solicitor Hilary Tompkins that concluded that BLM had discretion to deny renewal of Twin Metals' leases.[11] On September 12, 2016, Twin Metals Minnesota filed a lawsuit in Federal Court in Minnesota to challenge the M-Opinion, and to affirm and protect its long-standing mineral rights in the Iron Range region of Northeast Minnesota.[12]

On December 14, 2016, the Forest Service denied consent for the renewal of Twin Metals' leases and the following day, the BLM denied the renewal of the leases.[13] Shortly thereafter, at the end of the Obama administration, the U.S. Forest Service and the U.S. Bureau of Land Management (BLM) made proposals to withdraw 235,000 acres from mineral exploration and mining development.[14] The leases were within the boundaries of the withdrawal. The Forest Service is now conducting an extensive environmental review of the impacts of the proposed withdrawal to consider a 20-year withdrawal of the lands.

Section – by – Section

Section 1. Condition on Mineral Withdrawal of National Forest System Lands in Minnesota.

This section prohibits the withdrawal of minerals within NFS lands in the State of Minnesota from disposition without congressional approval.

Section 2. Condition on Monument Designation on National Forest System Lands in Minnesota.

This section prohibits the establishment of national monuments on NFS lands in the State of Minnesota without congressional approval.

Section 3. Clarifying the Nature of Mineral Rights on Forest System Lands in Minnesota.

This section clarifies that all mineral leases issued within NFS lands in the State of Minnesota are indeterminate right leases subject to automatic renewal if certain requirements are met.

This section outlines specific instances when the Secretary of Interior may suspend operations under a lease.

[11] U.S. Department of the Interior Solicitor Hilary Tompkins, M-37036: Twin Metals Minnesota Application to Renew Preference Rights Leases, https://www.doi.gov/sites/doi.gov/files/uploads/m-37036.pdf.
[12] *Franconia Minerals v. U.S. Dep't of the Interior , supra* note 8.
[13] U.S. Forest Service, Twin Metals Lease Renewal, https://www.fs.usda.gov/detail/superior/landmanagement/resourcemanagement/?cid=fseprd507250.
[14] *id.*

AMERICAN OVERSIGHT

This section authorizes the Secretary of Interior to issue permits for the use of surface lands, not included in the lease, for purposes connected with exploration and development of deposits.

This section clarifies the applicability of this legislation's lease terms to leases in effect, leases not yet in effect, and recently non-renewed hard rock mineral leases for the Superior National Forest in Minnesota.

Finally, this section clarifies this legislation should not be construed to permit prospecting for development and utilization of mineral resources within the Boundary Waters Canoe Area Wilderness or Mine Protection Area.

Administration Position

Unknown at this time.

Cost

CBO has not scored the legislation.

Effect on Current Law (Ramseyer)

Showing Current Law as amended by the Discussion Draft for a bill to require congressional approval of any mineral withdrawal or monument designation involving the national Forest System lands in the State of Minnesota, to provide for the renewal of certain mineral leases in such lands, and for other purposes
[text to be added highlighted in yellow]

Section 320301 of title 54, United States Code

320301. National monuments

(a) Presidential Declaration.-The President may, in the President's discretion, declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated on land owned or controlled by the Federal Government to be national monuments.

(b) Reservation of Land.-The President may reserve parcels of land as a part of the national monuments. The limits of the parcels shall be confined to the smallest area compatible with the proper care and management of the objects to be protected.

(c) Relinquishment to Federal Government.-When an object is situated on a parcel covered by a bona fide unperfected claim or held in private ownership, the parcel, or so much of the parcel as may be necessary for the proper care and management of the object, may be relinquished to the Federal Government and the Secretary may accept the relinquishment of the parcel on behalf of the Federal Government.

(d) Limitation on Extension or Establishment of National Monuments in Wyoming.-No extension or establishment of national monuments in Wyoming may be undertaken except by express authorization of Congress.

AMERICAN OVERSIGHT

(e) LIMITATION ON EXTENSION OR ESTABLISHMENT OF A NATIONAL MONUMENTS[sic] IN MINNESOTA.—No extension or establishment of national monuments on National Forest System lands in the State of Minnesota may be undertaken except by express authorization of Congress.

AMERICAN OVERSIGHT

Style Definition ...

~~[DISCUSSION DRAFT]~~

~~H.R.~~

I

115TH CONGRESS
1ST SESSION

H.R. 3905

To require congressional approval of any mineral withdrawal or monument designation involving the National Forest System lands in the State of Minnesota, to provide for the renewal of certain mineral leases in such lands, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

OCTOBER 2, 2017

Mr. EMMER ~~introduced~~ (for himself, Mr. PETERSON, and Mr. LEWIS of Minnesota) introduced the following bill; which was referred to the Committee on ~~[redacted]~~ Natural Resources

A BILL

To require congressional approval of any mineral withdrawal or monument designation involving the National Forest System lands in the State of Minnesota, to provide for the renewal of certain mineral leases in such lands, and for other purposes.

~~2~~1 *Be it enacted by the Senate and House of Representa-*

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AMERICAN OVERSIGHT

~~3~~2 *tives of the United States of America in Congress assembled,*

SECTION 1. SHORT TITLE.

This Act may be cited as the "Minnesota's Economic Rights in the Superior National Forest Act".

AMERICAN OVERSIGHT

DOI-(BLM)-19-0291, 19-0538-D-000058

SEC. ~~12~~. CONDITION ON MINERAL WITHDRAWAL OF NATIONAL FOREST SYSTEM LANDS IN MINNESOTA.

~~Minerals within the National Forest System lands~~ in ~~the State of Minnesota shall not be subject to~~ withdrawal ~~from disposition under United States~~ mineral ~~and geothermal geo-~~ ~~thermal leasing laws~~ law unless the withdrawal is specifically approved ~~by a future~~ an Act of Congress ~~.~~ enacted after the date of the enactment of this Act.

SEC. ~~23~~. CONDITION ON MONUMENT DESIGNATION ON NATIONAL FOREST SYSTEM LANDS IN MINNESOTA.

Section 320301 of title 54, United States Code, is amended by adding at the end the following new subsection:

"(e) LIMITATION ON EXTENSION OR ESTABLISHMENT OF A NATIONAL ~~MONUMENTS~~MONUMENT IN MINNESOTA.—No extension or establishment of national monuments on National Forest System lands in the State of Minnesota may be undertaken except by express authorization of Congress.".

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SECTION 3SEC. 4. CLARIFYING THE NATURE OF MINERAL RIGHTS ON FOREST SYSTEM LANDS IN MINNESOTA.

(a) MINERAL LEASES ISSUED WITHIN FOREST SYSTEM LANDS IN MINNESOTA.—

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(1) IN GENERAL.—All mineral leases issued within the exterior boundaries of National Forest System lands in the State of Minnesota under the authority of section 508bthe Act of Title June 30, 1950 (16, United States U.S.C. Code (64 Stat. 311508b), or section 402 of Reorganiza-tionReorganization Plan No. 3 of 1946 (60 Stat. 1097),5 U.S.C. App.), are indeindeterminate pref-terminate preferenceerence right leases that—

(A) shall—

(A) be issued for an initial 20-year period; and

(B) subject to as provided in paragraph (2), shall be renewable after the period described in subparagraphsubpara-graph (A) for 10-year renewal periods.

(2) REQUIREMENTS FOR RENEWAL.—A lease mayshall be renewed under paragraph (1)(B)—

(A) if the lessee complieshas complied with the terms and conditions of the lease during the preceding lease period; and

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(B) on the condition that, at the end of each ten-year renewal period, such reasonable readjustment of the terms and conditions of the lease may be prescribed by the Secretary of the Interior, in consultation with the Secretary of Agriculture, for the purpose of—

(i) encouraging production; or

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(ii) addressing changing conditions within the lease area.

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(b) SUSPENSION OF OPERATIONS.—The Secretary of the Interior may suspend operations under a lease described in subsection (a) when—

(1) the lease can only be operated at a loss due to market conditions; or

(2) operations are interrupted by strikes.

(c) PERMITS FOR USE OF SURFACE LANDS.—With respect to lands subject to a lease pursuant to subsection (a)(1), the Secretary of the Interior, in consultation with the Secretary of Agriculture, may issue permits for the use of surface lands not included in the lease for purposes connected with, and reasonably necessary to, the exploration, development, and use of the deposits covered by the lease.

(d) APPLICABILITY TO MINERAL LEASES.—This section shall apply with respect to all mineral leases described in subsection (a)(1), including—

(1) leases that on the date of the enactment of this section are not in effect; and

(2) the hard rock mineral leases for the Superior National Forest in the Minnesota identified as

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MNES–01352 and MNES–01353.

(e) APPLICABILITY OF NATIONAL ENVIRONMENTAL POLICY ACT OF 1969.—The National Environmental Pol-

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AMERICAN OVERSIGHT

icy Act of 1969 (42 U.S.C. 4331 et seq.) shall apply with respect to a mineral lease described in subsection (a). In the case of the renewal of the existing hard rock mineral leases referred to in subsection (d)(2), the Bureau of Land Management shall complete the pending environmental assessment no later than 30 days after the date of the enactment of this Act.

23 (f) EXCLUSION OF BOUNDARY WATERS CANOE AREA

24 WILDERNESS.—Nothing in this section may be con construed

25 10 strued as permitting the prospecting for, development and utiliza-

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~~1~~11 ~~utilization~~tion of mineral resources within the Boundary
~~Wa~~ Waters

12 ~~ters~~ Canoe Area Wilderness or Mine Protection Area.

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~~□HR 3905 IH~~

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