From: Baxter Christian VANM
To: Zacharias, Mark ENV:EX

Subject: Koocanusa

Date: Thursday, January 18, 2018 5:47:32 PM

Hi Mark,

Would appreciate having a quick chat soon if you have an opportunity.

Thanks, Christian

Christian Baxter

Director, Environmental Performance Teck Resources Limited Direct Phone: +1.604.699.4452 Phone: +1.604.699.4000 eMail: Christian.Baxter@teck.com

www.teck.com

From: Baxter Christian VANM
To: Zacharias, Mark ENV:EX

Cc: Morel, David P ENV:EX; Gooderham, Coleen E ENV:EX

Subject: Re: Koocanusa

Date: Thursday, January 18, 2018 8:08:11 PM

Yes, will do. Thanks.

Sent from my iPhone

On Jan 18, 2018, at 19:48, Zacharias, Mark ENV:EX < Mark.Zacharias@gov.bc.ca > wrote:

Hi Christian

Can you do 9:00 am tomorrow? You can call me at my work number.

Regards, Mark s.22

On Jan 18, 2018, at 5:47 PM, Baxter Christian VANM Christian.Baxter@teck.com wrote:

Hi Mark,

Would appreciate having a quick chat soon if you have an opportunity.

Thanks,

Christian

Christian Baxter
Director, Environmental Performance
Teck Resources Limited

Direct Phone: +1.604.699.4452

Phone: +1.604.699.4000

eMail: Christian.Baxter@teck.com<mailto:Christian.Baxter@teck.com>

www.teck.com<http://www.teck.com>

 From:
 Baxter Christian VANM

 To:
 Zacharias, Mark ENV:EX

 Subject:
 FW: Ltr from EPA

Date: Friday, January 19, 2018 9:04:58 AM
Attachments: Ltr to ECCC and BC Bypass (2).pdf

From: Bawa Meera VANM

Sent: Thursday, January 18, 2018 2:31 PM

To: Baxter Christian VANM Subject: Ltr from EPA

Would be helpful to discuss attached with you or I can take directly to Tom. Looks like we both have

time at 3.30 today.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JAN 12 2018

Office of International and Tribal Affairs

Lucie Desforges Director General, Multilateral and Bilateral Affairs Environment and Climate Change Canada 200, boul. Sacré-Coeur, 14th Floor, Office 1434 Gatineau, Quebec K1A 0H3 Canada Mark Zacharias
Deputy Minister of Environment
Ministry of Environment
and Climate Change Strategy
PO Box 9339 Stn Prov Govt
Victoria, BC V8W 9M2 Canada

Dear Ms. Desforges and Mr. Zacharias:

During our bilateral conversations with Global Affairs Canada and Environment & Climate Change Canada in October, Sylvain Fabi of GAC informed the U.S. Environmental Protection Agency of Teck Coal's proposed shutdown of its West Line Creek water treatment plant at the Line Creek mine in British Columbia. The EPA appreciates being made aware of this proposal, which would result in the discharge of untreated seepage and runoff from coal mining operations into the Elk River, and subsequently into the transboundary Lake Koocanusa and Kootenai River. I am writing to express the EPA's concerns regarding the impacts that this proposed action could have on U.S. waters and resources, as well as the sufficiency of information provided to support the shutdown and any approval decision. The EPA requests that British Columbia not approve any actions that would result in increased selenium and nitrate loading to Lake Koocanusa and the Kootenai River until there is a full understanding of changes to water quality and potential transboundary impacts.

The EPA has long been concerned about the effects of mining-related pollution in the Elk River Valley and its cumulative transboundary impacts to U.S. resources. In particular, we are concerned about increasing selenium concentrations in the watershed, which can bioaccumulate in aquatic species and birds and impair egg and embryo development. The EPA has been actively engaged in bilateral processes to address these concerns, including the past Technical Advisory Committee for the Elk Valley Water Quality Plan and the current Lake Koocanusa Monitoring and Research Working Group.

The Elk Valley Water Quality Plan states that four active water treatment plants will be installed in the Elk River Valley to stabilize and reduce selenium and nitrate concentrations in the watershed. However, the first treatment plant at West Line Creek has had numerous problems, including a fish kill in 2014, operational delays, and more recently, problems with discharging a more bioavailable form of selenium. The second treatment plant at Fording River, originally scheduled for operation in 2018, is now delayed. These setbacks are of concern to the EPA, as the treatment plants are the primary proposed mechanism to reduce selenium and nitrate loading to the Elk River watershed and Lake Koocanusa. As a result of these ongoing setbacks, the

Water Quality Plan's goal of reducing selenium and nitrate concentrations in waters downstream of mining operations is not being fully met.

On November 19, 2017, Teck submitted an application to British Columbia's Ministry of Environment and Climate Change Strategy (MECCS) for approval to take the West Line Creek plant offline until at least August 2018. Granting Teck's request would likely increase selenium loads to U.S. waters in Lake Koocanusa and the Kootenai River, resulting in more bioaccumulation of selenium in aquatic species and birds. The EPA notes that some fish samples in Lake Koocanusa already exceed British Columbia's fish selenium guideline for egg/ovaries (11 µg/L) and selenium fish tissue concentrations appear to be increasing. We therefore have serious concerns about additional selenium loading to the system that could occur if the treatment plant is taken offline. In addition, we have concerns and questions about the impacts of the current partial bypass that is occurring. We understand that Teck is already bypassing a portion of the mine water (approximately one-third) without treatment.

In addition, the Confederated Salish and Kootenai Tribes and the Kootenai Tribe of Idaho have both expressed concern to the EPA about potential impacts of the proposed bypass on fishery resources in Lake Koocanusa and the Kootenai River, which are integral to the Tribes' respective economies and cultures, and on U.S. tribal treaty rights. The EPA will continue to keep the Tribes updated on the status of this matter.

The EPA appreciates that the MECCS has shared certain information about the proposed West Line Creek shutdown and has continued to update the Montana Department of Environmental Quality and the EPA regional offices in Denver and Seattle about the status of Teck's request. The EPA has been provided with only limited sections of Teck's application, however, and has not been given the opportunity to review critical monitoring data and water quality modeling results. The limited information that we have received to date appears insufficient to support a finding that the proposed shutdown is warranted. Until complete information is provided regarding predicted changes to Lake Koocanusa water quality and aquatic resources, the EPA has serious questions about the possibility of allowing the West Line Creek treatment plant to remain offline for as much as a full year.

The 2010 Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy between British Columbia and Montana articulates the expectation that information will be shared proactively on approvals and permits that have potential cross-border water quality impacts. Consistent with that expectation, the EPA urges the Canadian federal and provincial agencies to: (1) ensure that Teck provides sufficient technical information to support its shutdown request; (2) provide information regarding potential impacts to U.S. waters from the current bypass and reduced water treatment rate; (3) provide the complete application package to the EPA so that we can adequately assess potential impacts to U.S. waters and resources; and, (4) discuss with the EPA the information provided and clarify how downstream impacts will be considered in the Canadian process for making a decision on the shutdown. We further urge the agencies to consider alternative treatment strategies to stabilize and reverse the increasing selenium and nitrate trends in the Elk River system and to ensure that such strategies are implemented in a timely manner.

Thank you for your consideration of the EPA's concerns. Please feel free to contact me at 202-564-1531, or have your staff contact Pam Teel at 202-564-6424 should you have questions or wish to discuss this matter.

Sincerely,

Jane Nishida

Principal Deputy Assistant Administrator Office of International and Tribal Affairs

cc: Sylvain Fabi, Global Affairs Canada

Cynthia Kierscht, U.S. Department of State Ryan Close, U.S. Department of the Interior

Tom Livers, Director, Montana Department of Environmental Quality Chairman Ron Trahan, Confederated Salish and Kootenai Tribes

Chairman Gerry Aitken, Jr., Kootenai Tribe of Idaho

Felicia Wright, U.S. EPA/OITA/AIEO

From: Syer Tom VANM
To: Zacharias, Mark ENV:EX

Subject: RE: Hi Tom. Are you at Roundup?

Date: Sunday, January 21, 2018 6:40:51 PM

Hi Mark - yes, around all week. Wednesday morning is pretty open if you have time. FYI - had to re-schedule our meeting time with the minister to a later date. I wanted him to meet some more of our key team and run through a few of our main files, but we don't have the right folks available and I would also like to do some more prep with you/others to maximize benefit. I'm thinking sometime in March in Victoria.

tom

----Original Message----

From: Zacharias, Mark ENV:EX [mailto:Mark.Zacharias@gov.bc.ca]

Sent: Sunday, January 21, 2018 6:13 PM

To: Syer Tom VANM

Subject: Hi Tom. Are you at Roundup?

Regards, Mark s.22 From: Syer Tom VANM
To: Zacharias, Mark ENV:EX

Subject: Re: Hi Tom. Are you at Roundup?

Date: Sunday, January 21, 2018 7:02:34 PM

Sounds good - please let the minister know the request to delay meeting is only to ensure we maximize his time with a good dialogue so Teck would benefit from some more prep and people available...

Tom

Sent from my iPhone

```
> On Jan 21, 2018, at 6:44 PM, Zacharias, Mark ENV:EX <Mark.Zacharias@gov.bc.ca> wrote:
> Thanks Tom.
You hit on what I wanted to talk about. Hopefully we will run into each other this week. I'm on a panel 9:15 Wed
morning so perhaps before that.
> Regards, Mark
>s.22
>> On Jan 21, 2018, at 6:40 PM, Syer Tom VANM <Tom.Syer@teck.com> wrote:
>> Hi Mark - yes, around all week. Wednesday morning is pretty open if you have time. FYI - had to re-schedule
our meeting time with the minister to a later date. I wanted him to meet some more of our key team and run through
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you/others to maximize benefit. I'm thinking sometime in March in Victoria.
>>
>> tom
>>
>> ----Original Message----
>> From: Zacharias, Mark ENV:EX [mailto:Mark.Zacharias@gov.bc.ca]
>> Sent: Sunday, January 21, 2018 6:13 PM
>> To: Syer Tom VANM
>> Subject: Hi Tom. Are you at Roundup?
>>
>> Regards, Mark
>> s.22
>>
```

 From:
 Syer Tom VANM

 To:
 Zacharias, Mark ENV:EX

 Cc:
 Baxter Christian VANM

 Subject:
 Teck - update session

Date: Thursday, January 25, 2018 1:40:35 PM

Mark – I think you may have previously attended a Teck-BC government update session... We are planning to do one again shortly with MEMPR. There is certainly enough on the agenda to do a similar conversation with you and your key executive members who interact with Teck. We have found these to be very useful discussions that enable a conversation across a number of files to understand perspectives and approaches that can enable both Teck and government officials to better execute needed actions and/or work on meeting information needs for effective decision-making. Thanks Mark. Note that I don't think this would include climate change file as that has separate engagement, but could include EAO and Kevin/team. Give Christian or myself a call to discuss further.

tom

Tom Syer
Head, Government Affairs
Community and Government Relations
Teck Resources Limited
Tom.Syer@teck.com

From: Syer Tom VANM

To: Zacharias, Mark ENV:EX; Jardine, Kevin EAO:EX; Baxter Christian VANM
Cc: Bawa Meera VANM; Freberg Mark VANM; Edwards Mark VANM

Subject: RE: Meeting with Teck - Mark/Kevin

Date: Wednesday, March 14, 2018 1:43:53 PM

Coleen – we're thinking that these updates are always good to do in person and there is no time sensitivity. However, we did have a couple of items to raise that we could use 15 minutes for. So if we could carry-on with 10-10:15 tomorrow as a quick conference call and re-schedule the in-person, that would be great.

Tom et al

----Original Appointment----

From: Coleen.Gooderham@gov.bc.ca [mailto:Coleen.Gooderham@gov.bc.ca] On Behalf Of

Zacharias, Mark ENV:EX

Sent: Wednesday, March 14, 2018 11:43 AM

To: Jardine, Kevin EAO:EX; Syer Tom VANM; Baxter Christian VANM Cc: Bawa Meera VANM; Freberg Mark VANM; Edwards Mark VANM

Subject: Meeting with Teck - Mark/Kevin

When: Thursday, March 15, 2018 10:00 AM-11:00 AM (UTC-08:00) Pacific Time (US & Canada).

Where: CONF Call: 1-877-353-9184 s.17 (Mark is the moderator)

Sorry to do this but Mark is in Estimates.. rather than waste the hour I have made this a conference call-however- if this does not work for you and you would rather have Mark/Kevin in person - please

advise me and I will add you to the list for Mark's next trip to Vancouver.

Thank you Coleen

Cc: Matzanke, Elise EAO:EX; Zacharias, Mark ENV:EX

Subject: Fwd: Meeting with Teck - Mark/Kevin

Date: Wednesday, March 14, 2018 1:46:57 PM

I suspect that the specific issues Tom is referring to are ENV specific, so no need to schedule me in on the call.

If I can, however, I'd like to join Mark in our rescheduled F2F meeting w/ Tom.

Rgds, K.

s.22

Please note: This email is intended for the addressee(s) only and may contain legally privileged information. Any unauthorized use, disclosure or reproduction is strictly prohibited.

Begin forwarded message:

From: "Syer Tom VANM" < Tom. Syer@teck.com>

Date: March 14, 2018 at 1:43:38 PM PDT

To: "Zacharias, Mark ENV:EX" < Mark.Zacharias@gov.bc.ca>, "Jardine, Kevin

EAO:EX" < Kevin.Jardine@gov.bc.ca >, "Baxter Christian VANM"

< Christian.Baxter@teck.com>

Cc: "Bawa Meera VANM" < Meera Bawa@teck.com >, "Freberg Mark VANM"

<Mark.Freberg@teck.com>, "Edwards Mark VANM"

<Mark.Edwards@teck.com>

Subject: RE: Meeting with Teck - Mark/Kevin

Coleen – we're thinking that these updates are always good to do in person and there is no time sensitivity. However, we did have a couple of items to raise that we could use 15 minutes for. So if we could carry-on with 10-10:15 tomorrow as a quick conference call and re-schedule the in-person, that would be great.

Tom et al

----Original Appointment----

From: Coleen.Gooderham@gov.bc.ca [mailto:Coleen.Gooderham@gov.bc.ca] On

Behalf Of Zacharias, Mark ENV:EX

Sent: Wednesday, March 14, 2018 11:43 AM

To: Jardine, Kevin EAO:EX; Syer Tom VANM; Baxter Christian VANM **Cc:** Bawa Meera VANM; Freberg Mark VANM; Edwards Mark VANM

Subject: Meeting with Teck - Mark/Kevin

When: Thursday, March 15, 2018 10:00 AM-11:00 AM (UTC-08:00) Pacific Time

(US & Canada).

Where: CONF Call: 1-877-353-9184 S.17 (Mark is the moderator)
Sorry to do this but Mark is in Estimates.. rather than waste the hour I have made this a conference call-however- if this does not work for you and you would rather have

Mark/Kevin in person - please advise me and I will add you to the list for Mark's next trip to Vancouver. Thank you Coleen

From: Syer Tom VANM

 To:
 Gooderham, Coleen E ENV:EX

 Cc:
 Zacharias, Mark ENV:EX

 Subject:
 RE: Call Teck - Mark

Date: Thursday, March 15, 2018 10:26:34 AM

Coleen – thanks for setting up the conference call. In terms of re-scheduling the in-person session, would April 5th or 19th work?

Tom

----Original Appointment----

From: Coleen.Gooderham@gov.bc.ca [mailto:Coleen.Gooderham@gov.bc.ca] On Behalf Of

Zacharias, Mark ENV:EX

Sent: Wednesday, March 14, 2018 2:02 PM

To: Zacharias, Mark ENV:EX; Syer Tom VANM; Baxter Christian VANM **Cc:** Bawa Meera VANM; Freberg Mark VANM; Edwards Mark VANM

Subject: Call Teck - Mark

When: Thursday, March 15, 2018 10:00 AM-10:15 AM (UTC-08:00) Pacific Time (US & Canada).

Where: CONF Call: 1-877-353-9184 s.17 (Mark is the moderator)

Updated as per Tecks request. Thank you

From: Neilson, Kirsten ENV:EX

To: Frampton, Caelie ENV:EX; Xia, Eveline ENV:EX

Subject: FW: Mining Day at the Legislature Meeting Confirmation - George Heyman

Date: Friday, February 23, 2018 9:19:38 AM

FYI

From: Loiacono, Sabrina EAO:EX

Sent: Friday, February 23, 2018 9:10 AM

To: Neilson, Kirsten ENV:EX

Subject: RE: Mining Day at the Legislature Meeting Confirmation - George Heyman

Hi Kirsten,

The only flag is that New Gold is currently in the EA process with Blackwater, although not yet near referral. In any event, the Minister should refrain from engaging in any relevant discussion in the very unlikely event that Tim raises the Project.

Kind regards,

S.

From: Neilson, Kirsten ENV:EX

Sent: Thursday, February 22, 2018 3:32 PM

To: Loiacono, Sabrina EAO:EX

Subject: FW: Mining Day at the Legislature Meeting Confirmation - George Heyman

Meeting is Monday, Feb 26 at 3:30

From: Allison Eggert [mailto:aeggert@mining.bc.ca]

Sent: Thursday, February 22, 2018 3:11 PM

To: Neilson, Kirsten ENV:EX

Subject: Mining Day at the Legislature Meeting Confirmation - George Heyman

Good Afternoon,

This is to confirm George Heyman's 3:30-4:00 meeting in \$.15 with

Bryan Cox - MABC

Jeff Hanman - Teck Resources (MABC Chair)

'Lyn Anglin - Imperial Metals (AME Chair)

Jim Harrison - MSABC

Tim Bekhyus - New Gold Inc.

Briefing material attached for your reference.

Should you have any questions, please do not hesitate to contact Cailey Murphy at

cmurphy@mining.bc.ca.