TELKWA COAL
LIMITED

Tenas Project

Public Consultation Report

September 23, 2020

Submitted to:	The BC Environmental Assessment Office 1st Floor 836 Yates St PO Box 9426 Stn Prov Govt Victoria BC V8W 9V1
Submitted by:	Telkwa Coal Limited Suite 1410 – 409 Granville Street Vancouver, BC V6C 1T2

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List of Acronyms	
Acid rock drainage	ARD
Allegiance Coal Limited	ACL
Application Information Requirements	AIR
Australian securities exchange	ASX
British Columbia	BC
British Columbia *Environmental Assessment Act*	BCEAA
British Columbia Environmental Assessment Office	EAO
Bulkley Valley Bowmen	BVB
Bulkley Valley Community Resources Board	CRB
Bulkley Valley Research and Monitoring Centre	BVRC
Canadian Environmental Assessment Agency	CEAA
EAO Electronic Project Information Centre	e-PIC
Environment & Climate Change Canada	ECCC
Environmental Assessment	EA
Environmental Assessment Application	EAA
Environmental Assessment Certificate	EAC
Environmental Assessment Report	AR
Environmental Management Act Permit Application	EMA PA
Industrial Use Permit	IUP
Major Mines Office	MMO
Member of the Legislative Assembly	MLA
Member of Parliament	MP
Ministry of Energy, Mines, and Low Carbon Innovation	EMLI
Ministry of Environment and Climate Change Strategy	ENV
Ministry of Forests, Lands, Natural Resource Operations and Rural Development	FLNRORD
Northwest BC Resource Benefits Alliance	RBA
Regional District of Bulkley-Nechako	RDBN
Skeena Watershed Conservation Coalition	SW
Telkwa Coal Limited	TCL
Tenas Project	The Project
Valued Component	VC

1. INTRODUCTION

1.1 Project Overview

Telkwa Coal Limited (TCL) is proposing to develop the Tenas Project (the Project), a surface coal mine designed to produce approximately 15.0 million tonnes of processed metallurgical coal product, at about 775,000 to 825,000 saleable tonnes per year, to be used in the production of steel. The mine life of the Project will be around 25 years, including the construction, operation, and decommissioning and reclamation phases.

TCL's proposed Project is about 25 kilometres south of Smithers and 7 kilometres southwest of the village of Telkwa in northwestern British Columbia (BC) (**Figure 1**) (**Figure 2**). The Project is located on provincial Crown Land, three freehold land parcels and nine coal licences held by TCL.

Under Part 3, Section 8 of the Reviewable Projects Regulation for the *BC Environmental Assessment Act* (2002) (BCEAA), the proposed Project will trigger an environmental assessment (EA), as its production is above the 250,000 tonnes per year threshold.

The Project's average daily production rate of 2,200 tonnes per day, however, is below the threshold for a new coal mine under federal environmental assessment legislation. On August 28, 2019, the *Impact Assessment Act, 2019* (IAA 2019) came into force. The IAA 2019 creates the new Impact Assessment Agency of Canada (IAAC) and repeals the CEAA 2012. EA under the IAA is not required for the Project because the proposed production capacity is well under the 5,000 tonnes per day coal production threshold for the construction, operation, decommissioning and abandonment of a new coal mine as defined in 16(d) of the Regulations Designating Physical Activities. IAAC confirmed on June 1, 2020 that the Project is not reviewable under the IAA.

TCL is applying for review of permits under the *BC Mines Act* and *Environmental Management Act.* No decisions on permits can be made until an EA Certificate is issued by the Minister of Energy, Mines and Low Carbon Innovation (EMLI) and the Minister of Environment and Climate Change Strategy (ENV).

The Project will include the development of:

- open pit
- Coal Processing Plant
- coal handling systems for run of mine coal, processed rock, and processed coal (including plant conveyors, storage bins, and stockpiles)
- storage piles for rock, processed rock, overburden and stockpiles for topsoil, processed coal, and processed rock
- administration, first aid, maintenance/warehouse, mine dry, laboratory, light vehicle, mine rescue, and warehouse buildings
- surface water management infrastructure (including ditches, sedimentation, control, management, and storage ponds)
- water supply wells, storage, and distribution network
- fuel and lubricant storage facilities and distribution network
- explosives magazine, storage silos, and vehicle wash and maintenance facilities
- propane storage facilities and distribution network
- solid waste management systems including landfill, recycling, and composting facilities
- haulroads and service roads within the minesite
- Tenas Access Corridor which encompasses a 11 km newly constructed Bypass Road and improvements to approximately 5 km of an existing forestry service road

- A 3.5 km long 25 kV powerline and a 25 kV to 600V substation adjacent to the Coal Processing Plant
- rail infrastructure consisting of processed coal stockpiles, scales, dust control facilities and a 2.5 km rail loop connected to the Canadian National Railway track
- A permanent bridge over Goathorn Creek

Tenas Project

Project Components

Legend

- Rail Line
- Highway
- Secondary Road
- Watercourse
- Wetland
- Waterbody
- Park or Protected Area
- First Nation Reserve
- Municipal Area
- 500 kV Transmission Line
- 138 kV Transmission Line

Mine Features

- 25 kV Power Line
- Explosive Facility Road
- Haul Roads
- Rail Infrastructure
- Water Pipeline
- Tenas Access Corridor
- Bypass Road
- Backfill
- Explosives Infrastructure
- Management Ponds
- Open Pit
- Pit Lake
- Pit Wall (exposed)
- Administrative Buildings
- Control and Plant Sedimentation Ponds
- Project Area
- Quarry
- Rail Infrastructure
- Topsoil Stockpile
- Telkwa Coal Limited Private Property
- Tenas Coal Licenses

Notes

1. All mapped features are approximate and should be used for discussion purposes only.
2. This map is not intended to be a "stand-alone" document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.

Sources

- Project Features: Allegiance Coal, 2020
- Basedata: Government of British Columbia
- Basemap: World Topo Base

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Telkwa Coal AIR
Northern British Columbia

Tenas Project

Legend

- CN Rail Line
- Highway
- Road
- Resource Road
- Watercourse
- Waterbody
- Wetland
- Park or Protected Area
- First Nation Reserve
- Tenas Block Outline
- Municipal Area
- Private Land

Mine Features

- Existing 25kV Power Line
- Proposed 25 kV Power Line
- Proposed Access Road (Helps Farm)
- Proposed Dedicated Coal Haul Road
- Proposed Explosive Facility Road
- Proposed Pit Haul Road
- Proposed Rail Infrastructure
- Proposed Water Pipeline
- Backfill
- Core Footprint
- Explosive Storage
- PAG Storage Area
- Pit
- Pit Lake
- Pit Wall (exposed)
- Plant and Maintenance Area
- Pond
- Project Area
- Quarry
- Rail Area
- Top Soil Pile

Notes

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2. This map is not intended to be a “stand-alone” document, but a visual aid of the information contained within the referenced Report. It is intended to be used in conjunction with the scope of services and limitations described therein.

Sources

- Mine Features: TLC, 2020
- Basedata: Government of British Columbia
- Basemap: ESRI World Topographic Map

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1.2 Proponent Information

TCL is a subsidiary of Australian-based Allegiance Coal Limited (ACL), a publicly listed company on the Australian securities exchange (ASX: AHQ) with headquarters in Sydney, Australia. TCL is a joint venture partnership with 90% owned by ACL, and 10% by Itochu Corporation of Japan. In addition to the Project, ACL owns three other projects, New Elk in Colorado, USA and the Kilmain and Back Creek projects located in Queensland, Australia. The Tenas Project is the company's flagship project. ACL does not own or operate any other projects in BC. TCL has offices in Telkwa and Vancouver, BC. The company was registered in BC on September 10, 2014 (BC1013154). The TCL website is: http://www.telkwacoal.com.

The environmental assessment and permitting contact for the Project is:

Angela Waterman, Director for Environment and Government Relations
Tel: 778-886-8809
Email: awaterman@allegiancecoal.com.au

1.3 Public Consultation Area

The Project is located about 25 kilometres south of Smithers and 7 kilometres southwest of the village of Telkwa in northwestern BC. The Project is located on provincial Crown Land, four private parcels, three freehold land parcels and nine coal licences held by TCL.

The proposed consultation area includes local municipalities and the regional district (e.g., Village of Telkwa, Town of Smithers, District of Houston, Witset, and the Regional District of Bulkley Nechako), and residents and community interest groups of the Bulkley Valley.

1.4 Identifying Interested Parties

Since February 2017, TCL has engaged with community members and parties interested or potentially affected by the Project, either directly or indirectly **(**

Table 1). These parties were identified based on the following criteria:

- Input from local Project consultants, local and regional government officials, community interest groups, and individual residents of the Bulkley Nechako.
- Interested parties previously consulted on similar Projects in the area
- Information gathered from local meetings, open houses, and information sessions.

This list includes individuals and groups that are potentially affected by the Project and/or have an interest in the Project: local and regional government; residents (e.g., residents of local communities); recreation groups (e.g., hikers, campers, hunters, and anglers); community interest groups; and those with commercial interests (e.g., forestry, trappers, and guide outfitters).

The list is not intended to be an exhaustive record of all potential interested parties. It is intended to provide an understanding of the groups that are in proximity to the proposed Project, may have an interest in the Project and may have been previously consulted on similar projects in the area.

As the Project progresses, additional parties may be identified. In addition, TCL will ensure that the public is aware of the Project through regular consultation activities and opportunities for feedback (e.g., social media and advertisements in local newspapers). **Section 3** provides information on consultation activities and how the local community and interested parties will be engaged over the course of the Project.

Table 1 Interested Parties

Interested Parties
Regional and Provincial Government
BC Environmental Assessment Office
BC Ministry of Agriculture
BC Ministry of Energy, Mines and Low Carbon Innovation
BC Ministry of Environment and Climate Change Strategy
BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development
BC Ministries of Jobs, Trade and Technology
BC Ministry of Municipal Affairs and Housing
BC Ministry of Transportation and Infrastructure
BC Agriculture Land Commission
Northern Health
Provincial Member of Legislative Assembly for Stikine
Federal Government
Canadian Environmental Assessment Agency
Environment and Climate Change Canada
Federal Member of Parliament for Skeena-Bulkley
Natural Resources Canada
Transport Canada
Local Governments
Village of Telkwa
Town of Smithers
Regional District of Bulkley-Nechako
District of Houston
Other Government Entities
BC Hydro
Northwest BC Resource Benefits Alliance
Work BC
Local and Regional Community
Tenas Mine Neighbours Group
Bulkley Valley Residents (includes residents of the Village of Telkwa, Town of Smithers, and Regional District of Bulkley Nechako).
Recreation Groups
Bulkley Valley Backpackers
Bulkley Valley Bowmen
Bulkley Valley Intensive Motorized Association
Bulkley Valley Quad Riders
Bulkley Valley Rod and Gun Club
Northwest Chapter Back Country Horsemen of BC
Smithers Snowmobile Club
Upper Skeena Angling Guide Association
Guide outfitters (commercial)
Local Trapline Holders (commercial)
Community Interest Groups
Bulkley Valley Community Resources Board
Bulkley Valley Lakes District Airshed Management Society
Bulkley Valley Museum
Bulkley Valley Research Centre
Education Providers (Coast Mountain College, Bulkley Valley Learning Centre, School District 54 Bulkley Valley, Smithers Secondary School, Telkwa Elementary School, Muheim Elementary School)
Local Businesses

Skeena Watershed Conservation Coalition
Smithers Chamber of Commerce
Smithers Exploration Group
Telkwa Museum
What Matters in our Valley
Industry
Canadian National Railway
West Fraser Timber Company (Pacific Inland Resources)
Pacific Northern Gas Ltd
Ridley Terminals Inc.

2. PURPOSE

2.1 Purpose of Public Consultation

TCL's primary objective is to effectively communicate information about the Project and involve those who may be affected by or have an interest in the Project. In this spirit, TCL is committed to addressing issues and concerns of the local community and stakeholders. TCL is committed to creating and maintaining opportunities for constructive dialogue and relationships with local and regional stakeholders to develop the Project responsibly. As part of the Project's consultation, TCL is focused on engaging with the community throughout the Project, including Project development, to ensure feedback from the public is considered when planning the Project.

The Public Consultation Plan is designed to achieve the following:

- Engage in early, frequent, open, and candid communication to build strong relationships with interested parties, particularly those who may be potentially affected by the Project
- Communicate information in a timely, consistent manner to local community members, regulators, and stakeholders throughout the Project to build awareness of the Project, including potential effects and proposed mitigation measures
- Identify and understand Project issues and concerns, as well as ensuring responsive engagement regarding stakeholder interests
- Create and facilitate opportunities for the community and stakeholders to provide meaningful input and feedback on the Project
- Respond to comments received on the Project and documents related to the EA process using tracking tables and other documentation methods
- Foster strong, collaborative, and long-term partnerships with regulators, community groups, and other stakeholders
- Gather input and feedback on the Project from the local community and stakeholders and ensure it is considered during Project planning

2.2 Purpose of the Public Consultation Report

Pursuant to the Section 11 Order, TCL is required to provide the EAO with a Public Consultation Report that is consistent with the approved Public Consultation Plan on file for the Project.

The Section 11 Order states that TCL must submit a Public Consultation Report to the Project Assessment Lead at the following times:

- Within 60 days after the close of a public comment period
- At the time of submission of the Application for an Environmental Assessment Certificate (the Application); and
- At any other time specified by the Project Assessment Lead.

The purpose of the Public Consultation Report is to document TCL's consultation efforts from early 2017 to July 23, 2020 when the 45-day public comment period on the draft Application Information Requirements (AIR) ended. For clarification, TCL will report on engagement activities with Indigenous groups separately, although, there is potential overlap between community and Indigenous engagement (i.e., there may be Indigenous attendance at open houses and other community and industry events TCL hosts or participates in).

3. PHASES OF PUBLIC CONSULTATION

Public consultation is integral to creating and maintaining relationships and open communication with the local community and interested parties and as such, will occur over the lifetime of the Project. Consultation will occur over four phases: Early Engagement; Pre-Application; Application Review; and Ongoing engagement during construction, operations, decommissioning and reclamation and post-closure. The phases are described in the Sections below.

3.1 Early Engagement Phase

Early and initial engagement included activities undertaken up to the issuance of a Section 10 Order of the *BC Environmental Assessment Act* on November 6, 2018. A Section 10 Order is a legally binding order that is issued once a project is deemed “reviewable” requiring the Project to undergo an environmental assessment.

Project engagement with the local community and interested parties was initiated in early 2017. Since 2017 and up to the issuance of the Section 10 Order, early engagement has included in-person meetings, site visits, phone-calls, and emails with interested parties listed in

Table 1. This includes Local, Regional, Provincial, and Federal Governments, local and regional community members, recreation groups, and community interest groups.

The primary activities that occurred in the Early Engagement phase are:

- Early Engagement Activities
- Early Engagement Meetings
- Open House
- Tenas Mine Neighbours Group
- Information Program

As the Project progresses, TCL will continue to employ engagement strategies that promote effective communication and relationship-building. The following sections describe the early engagement efforts on behalf of the Project thus far.

Table 2outlines the key Project interests of parties identified during early engagement stage.

Table 2 Key Project Interests from Interested Parties

Type of Audience	Interested Parties	Interest in the proposed Project
Local, Regional and Provincial Government	Village of Telkwa	Potential water, dust, noise, traffic, housing, economic impacts.
	Town of Smithers	Potential water, noise, traffic, fish, and economic impacts.
	Regional District of Bulkley-Nechako	Potential water, noise, dust, vibration, and traffic impacts.
	MLA Doug Donaldson	Suggested TCL go through EAO instead of just Major Mines Office (MMO).
Local Community	Tenas Mine Neighbours	Potential water, dust, noise, traffic, economic, wildlife, acid rock drainage (ARD), visual and recreation impacts.
	Bulkley Valley Residents	Potential water, dust, noise, traffic, economic, wildlife, ARD, visual, aquatic and recreation impacts.
Local Recreation Groups	Northwest Chapter Back Country Horsemen of BC	Potential wildlife and recreational impacts.
	Bulkley Valley Bowmen	Potential recreational impacts.
	Smithers Snowmobile Association	Potential recreational impacts.
	Upper Skeena Angling Guides Association	Potential water, fish and fish habitat and commercial recreation impacts.
	Guide Outfitters	Potential wildlife and commercial recreation impacts.
Local Community Groups	Bulkley Valley Community Resource Board	Potential water, dust, noise, traffic, economic, wildlife, ARD, visual and recreational impacts.
	Skeena Watershed Conservation Coalition	Potential water and fish impacts.
	Smithers Chamber of Commerce	Potential economic impacts.

Type of Audience	Interested Parties	Interest in the proposed Project
	Smithers Exploration Group	Potential water, noise, and visual impacts.
	Trout Creek Fish Hatchery	Potential water and fish impacts.
Local Business	Local Business	Potential water, fish, and economic impacts.
Education	Education	Potential economic and educational impacts.

3.1.1 Early Engagement Activities

TCL undertook several general engagement activities during the early engagement phase to communicate with the local community and interested parties and allow for open dialogue during this phase of the Project. General engagement activities are in addition to the open house, neighbours meeting, and Information Program that occurred during the early engagement phase. These activities include:

- **Open-Door Policy** – TCL has an open-door policy at our local Telkwa office. Community members are encouraged to stop by the office to speak with team members (including the CEO), as well as view open house poster boards that are on display and other information materials.
- **Meetings and Presentations** – TCL is committed to continuous engagement with interested parties via in-person meetings, telephone calls, and emails to share Project information and allow for Project-related questions. Much of this early engagement is detailed in **Section 3.1.2** of this Report.
- **Company Website** – Project updates and communication materials relevant to engagement have been posted on the company website.
- **Social Media** – TCL posts weekly to our Facebook and Twitter accounts. Content includes project information and updates, community events, communication, and information materials.
- **Site Tours** – TCL held site tours during the early engagement phase for interested parties.
- **Participation at Community and Industry Events** – TCL participated in several local community and industry events, including the Telkwa BBQ and the Bulkley Valley Exhibition in September 2018, and Minerals North in Houston in April 2018.

3.1.2 Early Engagement Meetings

The sections below detail engagement activities between TCL and four major groups of interested parties, starting in 2017 to November 6, 2018 when the Section 10 Order was issued by the BC EAO. The sections below are not intended to be an exhaustive record of TCL's comprehensive early engagement activities, but a capture of high-level discussion points.

3.1.2.1 Local, Regional and Provincial Government

TCL met with the following local and regional governments to provide information on the Project during the early engagement phase:

- Village of Telkwa
- Town of Smithers
- Regional District of Bulkley-Nechako (RDBN)
- Member of the Legislative Assembly (MLA) Doug Donaldson – Stikine

TCL has engaged with the Village of Telkwa since the Spring 2017, the Town of Smithers since the Spring 2018, the RDBN since the Fall 2017, and MLA Donaldson since the Spring 2018. As detailed in **Table 3**, TCL met with these groups 14 times collectively throughout the early engagement phase. Outside of these

meetings, TCL had the following number of interactions via email, phone, or letters with the Village of Telkwa (48), the Town of Smithers (13), the RDBN (46), and MLA Donaldson's office (5). Representatives from the Village of Telkwa, Town of Smithers, and Regional District of Bulkley Nechako are also a part of the EAO-led Advisory Working Group for the Project, where they represent the interests of their constituents.

Attendance of specific personnel in meetings varied. The Village of Telkwa was represented by one or more of mayor, deputy mayor, chief administrative officer, and councillor(s). The Town of Smithers was represented by the mayor and/or councillors, the RDBN was represented by either the Area A Director (Smithers / Telkwa Rural), the Director of Planning, and/or the RDBN Planner, and MLA Donaldson represented himself.

Table 3 outlines a list of meetings between TCL and local government during the early engagement phase and includes discussion topics.

Table 3 Local, Regional and Provincial Government Meetings

Meeting Date	No.	Discussion Topics
Village of Telkwa		
2017 April 10 September 27-29 November 8	5	• Project overview • Proposed rail infrastructure • Tenas Bypass Road (alternative haul route to Telkwa Coalmine Road) • Logging road (routes, number of trucks) • Utilizing local community businesses • Upcoming community open house structure
2018 June 18, 21	2	• Coal license application (onsite infrastructure) • The need for early community consultation (wider community engagement) • Community open house debrief • Selenium baseline studies • Ongoing dust and noise data collection • Water (quality, use) • Rail infrastructure includes a rail loop at the request of CN Rail • Project overview • TCL to participate in EA process
Total	**7**	
Town of Smithers		
2018 May 22 June 11	2	• Project overview • Formal Presentation with Mayor and council and reviewing meeting details • Tenas Bypass Road (alternative haul route to Telkwa Coalmine Road, truck traffic) • Blasting frequency • Salmon populations • Explanation of regulatory process • Community engagement • Water (use, quality) • Employment opportunities • Coal market (overview, product quality) • Caribou concerns
Total	**2**	

Meeting Date	No.	Discussion Topics
Village of Telkwa		
Regional District of Bulkley-Nechako		
2017 September 28 December 7	2	• Project overview • Rail infrastructure • Tenas Bypass Road (alternative haul route to Telkwa Coalmine Road) • Logging road (routes, number of trucks) • Indigenous consultation
2018 February 1 June 11	2	• Industrial Use Permit (IUP) application (rail infrastructure) • Coal license application (geotechnical work along mine infrastructure alignment) • Importance of community consultation • Scope of project.
Total	**4**	
MLA Doug Donaldson – Stikine		
2018 May 1	1	• Project overview • Tenas Bypass Road (alternative hauling route to Telkwa Coalmine Road) • Community engagement • EA process
Total	**1**	

Outside of local and regional governments, TCL engaged with two government or government-related entities, Northwest BC Resource Benefits Alliance (RBA) and Work BC, and Member of Parliament (MP) for Skeena-Bulkley Valley, Nathan Cullen. TCL engaged with RBA via email, phone, and letters 15 times in the early engagement phase to present a Project overview and for RBA to provide an organizational overview. TCL wrote a letter in support of RBA's efforts with the province to obtain a greater share of provincial revenue. TCL emailed Work BC once on May 28, 2018 regarding future employment opportunities. TCL emailed and phoned MP Cullen three times to coordinate a meeting.

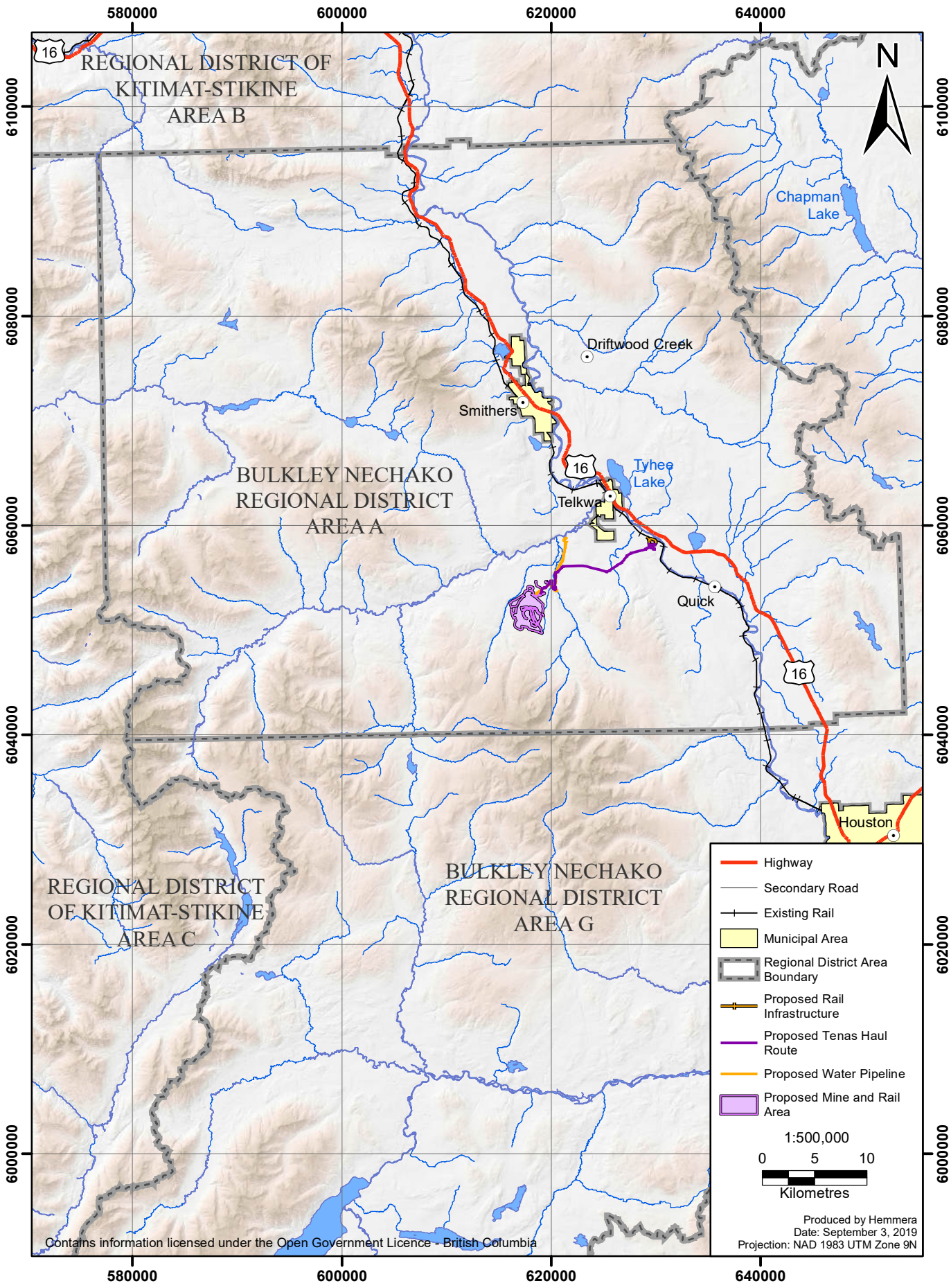
3.1.2.2 Local Community Meetings

TCL has organized the local community into two groups: the Tenas Mine Neighbours, and Bulkley Valley Residents. The Tenas Mine Neighbours consist of the fifteen families with property and/or tenure in closest proximity to the Project. TCL felt it was important to create a neighbours' group to provide a dedicated forum for those with property and/or tenure in closest proximity to the Project, to receive Project information and ask questions, beyond the community open houses. Bulkley Valley Residents include those living in Village of Telkwa, Town of Smithers, and RDBN (**Figure 3**).

TCL initiated engagement with the local community in Fall 2017. Conversations have taken multiple forms, including informal discussions and meetings, phone calls, letters, and emails. In addition to this engagement, TCL also hosted a community open house and a Tenas Mine Neighbours meeting within the early engagement phase. These will be as discussed in **Section 3.1.3** and **Section 3.2.2**

Within the Early Engagement phase, TCL met with the local community collectively 54 times, not including the neighbours meeting and community open house. Outside of these informal meetings, TCL has had the following number of interactions via email, phone, or letters with the Tenas Mine Neighbours (95), and Bulkley Valley residents (62).

Table 4 provides a list of meetings between TCL and the local community in the Early Engagement phase and includes discussion topics.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Proposed Rail Infrastructure
Proposed Tenas Haul Route
Proposed Water Pipeline
Proposed Mine and Rail Area
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Table 4 Local Community Meetings

Meeting Date	No.	Discussion Topics
Tenas Mine Neighbours		
2017 November 8	1	• Creation of Neighbours group • Project overview • Tenas Bypass Road (increase in traffic, employee use of road, dust, noise) • Potential road use agreement • Recreation (continued access)
2018 February 6 March 13 May 15 July 25 August 8 September 10, 19, 20, 28 October 9-12, 19, 29-30	34	• Potential changes to quality of life • Tenas Bypass Road (location, access, increase in traffic, noise, and dust due to hauling trucks, land tenure) • General project updates • Partisol station (installation) • Rail infrastructure (location, updates) • Grazing of cattle (licenses, leases) • Wildlife crossings on the Bypass Road • Water (quality, available data, use) • Employment opportunities • Tenas Mine Neighbours group meeting • Exploration program (notification of upcoming drilling program) • Recreation (continued access)
Total	**35**	
Bulkley Valley Residents		
2018 May 9, 10, 14-15, 17-18, 22-25 June 4, 7, 11-12, 15, 18, 26 August 17 October 18	25	• Project overview and updates • Water (use, quality) • Regulatory process explanation • Visual quality (impacts) • Upcoming community open house • Future meetings (planning) • Exploration program (property use) • Rail infrastructure (location)
Total	**25**	

3.1.2.3 Local Recreation Groups

TCL has met with the following local commercial and non-commercial recreation groups to provide information on the Project during the Early Engagement phase:

- Northwest Chapter Back Country Horsemen of BC
- Bulkley Valley Bowmen
- Smithers Snowmobile Association
- Upper Skeena Angling Guides Association (commercial)
- Guide Outfitters (commercial)

TCL began engaging with local recreation groups in Spring 2017 and continued throughout the early engagement phase. As detailed in **Table 5**, TCL met with these groups 11 times collectively throughout the early engagement phase. Outside of these meetings, TCL has had the following number of interactions via

email, phone, or letters with the Northwest Chapter Back Country Horsemen of BC(11), the Upper Skeena Angling Guides Association(8), and the Smithers Snowmobile Association (1). On May 23, 2018 TCL and the Northwest Chapter Back Country Horsemen of BC signed a Communication and Engagement Agreement detailing the communication and engagement methods of their partnership.

Table 5 provides a list of meetings between TCL and the local recreation groups during the early engagement phase and includes discussion topics.

Table 5 Local Recreation Group Engagements

Meeting Date	No.	Discussion Topics
Northwest Chapter Back Country Horsemen of BC		
2017 September 27	1	Project location and overview, BCH described organizational structure and mission, recreation sites and trails.
2018 March 12 April 27 September 27 November 6	4	Enhancing Project minesite, partnership agreement, site use agreement, Project trails.
Total	**5**	
Bulkley Valley Bowmen		
2018 October 9	1	Bulkley Valley Bowmen's (BVB) use of their property, BVB described organizational structure and mission.
Upper Skeena Angling Guides Association		
2018 July 12, 24 September 27	3	Project overview, plans for future communication and potential fishing tour, community engagement strategy.
Guide Outfitters		
2018 September 27	1	Project overview, hunting and grazing rights, site access.
Smithers Snowmobile Association		
2018 October 25	1	Map of project and existing public trails, recreation use in Telkwa area.
Total	**11**	

TCL has also engaged with several recreation groups via email, phone, or letters, including local trapline holders, the Bulkley Valley Quad Riders, and the Bulkley Valley Rod and Gun Club. On June 21, 2018, TCL had a phone call with a local trapline holder to discuss historical trapping in the areas, as well as a Project overview. Further engagement with local trapline holders will be discussed in **Section 3.2.3.1**. TCL had a phone call on October 4, 2018 with the Bulkley Valley Quad Riders to discuss the Regional Access Management Plan and limited motorized access areas. TCL also had a phone call with Bulkley Valley Rod and Gun Club on October 4, 2018 to schedule an upcoming meeting.

3.1.2.4 Local Community Interest Groups

TCL met with the following local community interest groups to provide information on the Project during the Early Engagement phase: The Bulkley Valley Community Resources Board, Skeena Watershed Conservation Coalition, Smithers Chamber of Commerce, Smithers Exploration Group, and Trout Creek Fish Hatchery. TCL began engaging with local community interest groups in Summer 2017 and continued throughout the early engagement phase. As detailed in **Table 6**, TCL has met with these groups 28 times collectively throughout the early engagement phase. Outside of these meetings, TCL has had the following number of interactions via email, phone, or letters:

- Bulkley Valley Community Resources Board (CRB) (18)
- Bulkley Valley Research and Monitoring Centre (BVRC) (15)
- Skeena Watershed Conservation Coalition (10)
- Smithers Chamber of Commerce (18)
- Smithers Exploration Group (25)
- Trout Fish Hatchery
- 19 Locally owned and operated businesses
- Education providers (9)
    - Bulkley Valley Learning Centre
    - Bulkley Valley Museum
    - Coast Mountain College – Smithers Campus
    - Smithers Secondary School

Table 6 provides a list of meetings between TCL and the local community interest groups during the Early Engagement phase and includes discussion topics.

Table 6 Local Community Interest Group Engagements

Meeting Date	No.	Discussion Topics
Bulkley Valley Community Resource Board		
2018 June 18	1	Project overview, EA regulatory process description, water use and quality, ARD mitigation measures, dust mitigation measures, air quality standards, noise levels at the mine site and blasting frequency, increase in truck traffic, direct economic benefits to the community, recreation access, visual quality, wildlife population concerns surrounding moose, caribou, aquatic life.
Skeena Watershed Conservation Coalition		
2018 April 26 August 9	2	Project overview, Skeena Watershed Conservation Coalition (SW) provides organizational overview, successful community relations strategies.
Smithers Chamber of Commerce		
2018 May 8 May 9	2	Project overview, economic benefits to local community.

Meeting Date	No.	Discussion Topics
Smithers Exploration Group		
2017 April 10 September 27	1	Project overview, TCL undertaking two feasibility studies, Indigenous engagement, Rock Talks, noise concerns, water quality and visual quality impacts.
Trout Creek Fish Hatchery		
2018 July 27	1	Lifecycle of salmon, operations of the hatchery, local waterways.
Total	**7**	
Local Business		
2018 May 15 July 24 September 5, 7, 10, 24 October 9-10, 18, 25	19	Project overview and timeline, employment opportunities, community perspectives on the project, regulatory process, habitat for local fish and aquatic life, water quality, stresses to local housing market.
Total	**19**	
Education		
2018 May 4 September 21, 25 October 10	5	Project overview, future opportunities for collaboration, upcoming TCL presentation to students, ways to increase student interest in mining, opportunities for Indigenous training.
Total	**5**	

3.1.3 Tenas Mine Neighbours Group

In addition to holding open houses for the community, TCL felt it was important to engage closely with the neighbours nearest the minesite. On November 8, 2017, TCL held a Tenas Mine Neighbours meeting at the Cointe River Inn for the Cottonwood subdivision, the closest neighborhood to the project area, comprising a dozen families. Many more community members attended the event than intended, including several dozen community members living outside the Cottonwood subdivision. At this neighbourhood meeting, TCL provided its conceptual project plan.

Topics discussed at the meeting included:

- project scope
- coal haul route
  - truck traffic
  - noise
  - safety; and
  - dust
- the regulatory process
- fish
- water quality and use
- caribou

- forestry
- recreational use of the area; and
- the coal market, including product quality.

TCL plans to hold neighbours' meetings approximately twice a year, as required, for the fifteen families with property and/or tenure in proximity to the Project as an opportunity to receive Project information and ask questions in an intimate setting. Future neighbours' meetings are planned for the pre-application phase and application review phase and will be discussed in **Section 3.1.3 and 3.2.2**.

3.1.4 Information Program

TCL's Information Program is a three-phase approach to share information with interested parties on various topics related to the Project, described below:

1. Phase 1 – Project and General Coal Bulletins
2. Phase 2 – Project-specific Infographics and Technical Briefs
3. Phase 3 – Potential Seminar Speaker Series on Phase 2 topics

Each phase is intended to build on the previous phase, with the goal of furthering community members understanding of mining and Project-related topics. The information bulletins and technical briefs described in Phase two will be distributed electronically to interested parties and hard copies will be found at the Telkwa Office, Smithers Exploration Group Office, and Smithers Library. The potential speaker series described in Phase three is intended to occur at a venue in either Telkwa or Smithers and will depend on the level of interest from the community.

The first phase of the Information Program was executed in early 2018 during the Early Engagement phase and involved sharing Project and general coal bulletins which included:

- "Tenas Project Brochure April 2018" (source: TCL)
- "Steel Making Coal"; (source: Coal Alliance)
- "Coal: How we use it" (source: Coal Alliance)
- "Coal: Health Facts" (source: Coal Alliance)
- "Coal: Local Economies" (source: Coal Alliance)
- "Basic Coal Facts" (source: World Coal Association)

Additional titles will be released to cover further topics of interest.

The second phase of the Information Program will be shared during the pre-application stage (**Section3.1.4**). The third phase of the Information Program is intended to occur during the Application Review Stage (**Section 3.2.3**).

3.1.5 Community Open Houses

As evidence of TCL's commitment to early community engagement, TCL held its first community open house in Telkwa on May 23, 2018, size months prior to lodging the Project Description with the BC EAO. Roughly 120 people attended (105 people signed in). The open house was the first in a series of several TCL plans to hold to share information, answer questions, track Project concerns, and form meaningful relationships with community members. Of the several open houses, the EAO will host two; one on the draft AIR and one on the Environmental Assessment Application (EAA). Through the initial open house, community members and interested parties identified concerns relating to:

- haulroad
  - traffic

    - noise
    - dust
    - safety; and
    - maintenance
- wildlife:
    - caribou and habitat; and
    - salmon and aquatic habitat
- water:
    - water use; and
    - water quality
- regulatory process and type of permit
- mining practices
- hunting access
- impacts to property value
- recreation; and
- ARD.

TCL developed 17 poster boards for the open house during the early engagement phase that covered several subjects, including general Project information and baseline studies to date. The open house was advertised via the following:

- Smithers Interior News
- The Moose FM
- CFNR Radio

3.1.6 Early Community Engagement Outcomes

Through 12 months of early discussions, two key community concerns emerged. The first related to the Project's use of the Telkwa Coalmine Road for coal haul. Community members and interested parties expressed their preference for construction of a new road to bypass the community rather than using the existing road for coal haul, citing their concerns about:

- the potential safety risks to people walking or children playing on or near the existing road, as there are no sidewalks
- the potential degradation of the gravel road due to weight of truck and frequency of truck traffic
- the potential for dust generation and impairment of air quality to human health, as well as impacts to vegetable and fruit gardens; and
- the potential for noise.

The second key concern related to the regulatory process for the Project. While some community members did not prefer for either the EAO or the EMLI to administer a project review, most of the community preferred the EAO administer the project review. Community members and interested parties overwhelmingly preferred TCL to be assessed under the BCEAA, primarily based on their level of understanding of the EA process compared to EMLI and Environment and Climate Change Strategy's (ENV) environmental permitting process.

Based on community feedback gathered in the early engagement phase regarding the Project's use of Telkwa Coalmine Road, TCL decided to build a dedicated haulroad at the outset of the Project, instead of during operations which was originally planned. Advancing the construction of the dedicated haul road required an increase in planned mine production. The added production capacity brought the Project within the requirements of the BCEAA

3.2 Pre-Application Phase

Pre-Application phase consultation occurs following issuance of the Section 10 Order by the EAO and includes engagement undertaken up to the submission of the Environmental Assessment Certificate (EAC) Application. For the purposes of this Report, engagement prior to the issuance of the Section 10 is referred to as early engagement. The Section 10 Order for the Project was issued by the EAO November 6, 2018. This section outlines pre-application phase engagement from November 7, 2018 to July 23, 2020, which was the last day of the 45-day comment period on the draft AIR. This Report will be updated prior to the submission of the EAA to account for pre-application phase engagement post July 23, 2020.

During the pre-application phase, TCL is undertaking a variety of activities to fulfil public consultation requirements of the Section 11 Procedural Order. The requirements for the pre-application phase include one public comment period and one community open house led by the EAO on the draft AIR. TCL has exceeded requirements by hosting three open houses (including the open house hosted in the early engagement phase) in addition to the two EAO-led open houses to review the draft AIR (**Section 3.2.4.3**). TCL has also hosted three Tenas Mine Neighbours meetings (in additional to the meeting held in the early engagement phase), although this is not a regulatory requirement. These activities provide further opportunity to share information and build relationships between TCL and the community.

An important component of the pre-application phase is the distribution of the draft AIR for public review. The draft AIR identifies the information that will be provided by a proponent in an Application for an EAC. Community input and engagement is a key step in the development of the AIR document. During the pre-application phase, a community open house and public comment period are held to present the draft AIR and allow the public to provide comments on the document. **Section 3.2.4 and 3.2.5** discuss the Community Open House and public comment period on the draft AIR in further detail.

The primary activities to occur in the pre-application phase are:

- Ongoing Engagement Activities
- Open Houses
- Tenas Mine Neighbours Group Meetings
- Information Program
- Public Comment Period on the draft AIR
    - Document Availability
    - Response to Comments
    - Public Consultation Reports

As the Project progresses, TCL will continue to employ engagement strategies that promote effective communication and relationship-building. The following sections describe the pre-application phase efforts thus far, as well as future planned activities.

3.2.1 Pre-Application Phase Engagement Activities

It is important to note that the pre-application phase of public consultation is a part of the overall continuum of community engagement with interested parties that began in early 2017 and will be ongoing throughout Project planning, construction, operations, decommissioning and reclamation, and post-closure.

In addition to the public comment period, three open houses, three neighbours meetings, and Information Program, TCL will also have a variety of engagement activities during the pre-application phase to communicate with interested parties and allow for open dialogue during this phase of the Project. Activities that have been ongoing since the early engagement phase, include but are not limited to:

- **Open-Door Policy** – TCL has an open-door policy at our local Telkwa office. Community members are encouraged to stop by the office to speak with team members (including the CEO), as well as view open house poster boards that are on display and other information materials.
- **Meetings and Presentations** – TCL is committed to continuous engagement with interested parties via in-person meetings, telephone calls, and emails to share Project information and ask Project-related questions.
- **Company Website** – Project updates and communication materials relevant to engagement will be posted on a company website.
- **Social Media** – TCL posts weekly to our Facebook and Twitter accounts. Content includes project information and updates, community events, communication, and information materials.
- **Site Tours** – TCL may hold additional site tours during the pre-application phase for interested parties who wish to view key areas of where site development will occur.
- **Participation at Community and Industry Events** – TCL participates in several local community and industry events, including the Telkwa BBQ, Bulkley Valley Exhibition, Northwest Trade Expo, and Smithers Chamber of Commerce meetings.
- **Sponsorship** – TCL has sponsored several local organizations and activities, including establishing two signature community events, a Family Skating Party on Family Day in February, and a Summer Kick-off BBQ in June. The list below outlines all the community groups we have supported to date

    - Bulkley Valley Bowmen
    - Bulkley Valley Food Bank
    - Bulkley Valley Hospital Foundation
    - Bulkley Valley Kinsmen (Telkwa BBQ)
    - Coast Mountain College
    - Dze L K'ant Friendship Centre in Houston
    - Smithers Curling Club
    - Smithers Exploration Group
    - Smithers Golf and Country Club
    - Smithers Rodeo Club (Bulkley Valley Exhibition)
    - The Ark Playday Centre in Telkwa
    - Telkwa Elementary School
    - Telkwa Museum
    - Telkwa Reading Room

3.2.2 Tenas Mine Neighbours Group

TCL held its second neighbours meeting on November 7, 2018 at the Old Church in Smithers. As previously noted, at the initial neighbours meeting on November 8, 2017 at the Cointe River Inn, many more community members joined than was intended. As a result, several Tenas Mine Neighbours expressed their preference of having a more intimate meeting comprised of just those neighbours living within closest proximity to the Project. Therefore, when TCL held its second neighbours meeting, the fifteen families with property and/or tenure in proximity to the Project were invited. At the second neighbours meeting, TCL gave a Project overview and update presentation.

Topics discussed at the meeting included:

- project overview

- project updates
- the regulatory process
- coal mine road and proposed haul road
  - truck traffic
  - noise
  - dust
- water quality and use; and
- access for recreation use

TCL held a third neighbours meeting with the fifteen families with property and/or tenure in proximity to the Project on April 10, 2019 at the Ark Playday Centre in Telkwa to provide a project schedule and present the Tenas Project's baseline program.

TCL held a fourth neighbours meeting on November 6, 2019 at the Telkwa Community Church. The meeting was held the day before the third community open house and gave neighbours a preview of the poster boards that would be featured at the open house the following day. This meeting provided neighbours the opportunity to ask questions and receive project information on several subjects, such as project infrastructure, coal processing, water sourcing and discharge, and the Tenas Bypass Road.

3.2.3 Information Program

TCL's Information Program is a three-phased approach to share information with interested parties on various topics related to the Project. As previously noted, the Information Program phases are as follows:

1. Phase 1 – Project and General Coal Bulletins
2. Phase 2 – Project-specific Infographics and Technical Briefs
3. Phase 3 – Potential Seminar Speaker Series on Phase 2 topics

Phase one was initiated during the early engagement phase. The second phase of the Information Program consists of Project-specific Infographics to be accompanied by 1-4-page technical briefs.

Infographics and Technical brief topics may include:

- About Coal
- Mining and Reclamation
- Selenium
- BC Water Quality Guidelines
- Caribou Biology
- Fish and Aquatic Resources
  - Bioaccumulation and Biomagnification
  - Environmental and Aquatic Effects Monitoring Programs; and
- Geochemistry

The third phase of the Information Program will commence during the Application Review phase.

3.2.3.1 Engagement with Local Trapline Holders

The Project overlaps with one provincially registered trapline (TR0609T026).

On December 3, 2018, TCL sent letters to nine people who own traplines within or nearby the Project area. The letters notified them of the Project and requested a meeting to enable TCL to provide Project overview and answer questions.

Many of the trapline holders use a general delivery service, a mail service that acts a temporary mailing address often used by individuals without a permanent address. Canada Post will hold general delivery service mail for a period before sending it back to the original sender.

After TCL sent the nine letters on December 3, 2018, five letters were returned to TCL, prompting TCL to re-send the letters on January 24, 2019. Following this, four letters were sent back a second time, which resulted in TCL re-sending the four letters on February 20, 2019. The four letters were returned, so TCL resent one letter on March 25 and three letters on April 15. During January 2019, TCL engaged with three different trapline holders, with six interactions total.

3.2.4 Open Houses

Four open houses were held during the pre-application stage; two were led by TCL, and in consideration of COVID-19 and physical distancing guidelines, EAO led two virtual open houses in lieu of one in-person event. These four open houses are in addition to the first open house held by TCL in May 2018 during early engagement.

TCL developed poster boards and/or other materials for the open houses during the pre-application phase that covered several subjects, including general Project information, baseline studies, Valued Components, and the draft AIR. Open houses were advertised via the following:

- Smithers Interior News
- The Moose FM
- CFNR Radio
- TCL's social media accounts (Facebook and Twitter)

3.2.4.1 Open House #2 – November 28, 2018

The second open house was held on November 28, 2018 at the Telkwa Elementary School Gym to allow the community and interested parties an opportunity to review Project poster boards and discuss the Project with the TCL team and subject matter experts, including wildlife, fish and vegetation biologists, and anthropologists. About 150 community members attended, and through feedback forms received from those in attendance, key project interests were related to water, ARD, dust, and noise.

3.2.4.2 Open House #3 – November 7, 2019

The third TCL led open house occurred on November 7, 2019 at the Telkwa Community Hall, with about 100 people in attendance. Open houses #2 and #3 followed similar formats, including poster boards that provided project related information, as well as subject matter experts being present to answer questions from local community members. This open house covered more detailed project information than the previous one, including poster boards on project infrastructure, coal processing, water sourcing and discharge, and the Tenas Bypass Road.

At this open house, TCL previewed a Project overview video that illustrated the project location, components, and project phases. The Telkwa Museum also had a table at the open house to highlight Telkwa's rich mining history. The Telkwa Museum also displayed "A History of Coal Mining in Telkwa", an informational booklet detailing Telkwa's mining history that includes pictures and interviews with residents. The booklet was a local collaboration project between the Telkwa Museum, TCL, and Bulkley Valley Printers. All donations collected from the booklet went to the Telkwa Museum.

3.2.5 EAO-led Open Houses

3.2.5.1 Open House #4 and #5 – June 17 and 23, 2020

Two EAO-led open houses were held virtually on June 17 and 23, 2020. Due to the COVID-19 pandemic and provincial health guidance, it was necessary for the EAO to adjust the format of the open house. In

recognizing the change to the virtual format, the EAO made several accommodations; hosting two open houses instead of one, extending the public comment period from 30 days to 45 days, having the events on different days of the week (Tuesday and Wednesday) and also during different times of day (1-3 pm and 5-7 pm) to include as many people as possible. Comments were not limited to the open house event days.

The EAO allowed public comments on the draft AIR for 45 days. TCL will address every question posted by the public on the EAO website. Please also note that TCL held three in-person open houses in 2018 and 2019 in advance of the virtual ones in 2020. As well, the community is always welcome to visit our Telkwa office to review the many project boards and infographics with our Telkwa-based team. **Section 3.2.5** includes additional information on the public comment period.

The format of the virtual open houses differed from the earlier open house #2 and #3, predominantly because they were online. The virtual open houses included a brief presentation from the EAO on the EA process and the comment period. This was followed by a detailed presentation by TCL that included an update on the mine plan, a project overview video, and review of the draft AIR, which specifically outlined the Projects Intermediate and Valued Components (IC's and VC's respectively) that will be assess in the EA Application. EAO and TCL's presentations collectively lasted about an hour, and then there was an hour-long Q&A period.

About 150 people total attended the two open houses (June 17 and 23), with a total of 125 questions submitted and 61 answered during the open houses. Key themes posed by the community during the virtual open houses include:

1. EA process and public input / format of meetings
2. Engagement with the Wet'suwet'en
3. Water and fish
4. Climate Change
5. Mine design
6. Air quality and dust
7. Steelmaking coal; and
8. Socio-economics

3.2.5.2 Public Comment Period

As per the requirements detailed in the Section 11 Order, the EAO provided a public comment period of 45 days on the draft AIR document. As noted, the EAO extended the public comment period from 30 to 45 days in lieu of COVID-19 and physical distancing guidelines. The public comment period for the Project's draft AIR document was June 8 to July 23, 2020. **Section 3.2.5.3** includes detailed information on the draft AIR public comment period.

3.2.5.2.1 Advertising

The public comment period for the draft AIR document was advertised via the following:

- Smithers Interior News
- Houston Today
- The Moose FM
- CFNR Radio
- Open House and Public Comment Period flyer sent to Telkwa residents via Canada Post
- TCL's social media accounts (Facebook and Twitter)
    - This included a "boosted" Facebook advertisement for the public comment period.

Newspaper advertisements in the Smithers Interior News and Houston Today ran for three weeks straight, beginning on May 26 and ending on June 3. A total of 24 radio advertisements played collectively on Moose

FM and CRNR Radio (12 on each station) between June 1 to 23 strategically played twice per day on the virtual open houses (June 17 and 23).

Advertisements posted in local newspapers were prepared according to specifications provided by the EAO and included a brief outline of the proposed Project and the purpose of the draft AIR document. The advertisements also provided details on the public comment period, the Open House, and contact information for providing comments to the EAO.

TCL sent an Open House and Public Comment Period flyer to Telkwa residents via Canada Post on June 15 (**Appendix A**). The flyer provided information on the open houses, public comment period, draft AIR, as well as the full list of proposed ICs and VCs that will be assessed in the EA.

The electronic version of the Open House and Public Comment Period flyer was posted to TCL's social media accounts, including Facebook and Twitter. The flyer was also "boosted" to a Facebook advertisement that ran from June 8 to 23. During that time, the advertisement reached 5,322 people total, including 2,759 that were within our audience (Smithers + 50 miles and Burns Lake +25 miles).

3.2.5.2.2 Document Availability

To facilitate responses and feedback from the public and interested parties, the draft AIR document was posted electronically to the EAO Electronic Project Information Centre (e-PIC). TCL had previously planned to have physical copies of the draft AIR available at several locations, including the open house, but due to COVID-19, in-person information sharing was not possible. Paper copies of the draft AIR document were made available upon request at the TCL Telkwa Office.

3.2.5.3 Response to Comments

As per the Section 11 Order, TCL is required to respond to public comments received on the draft AIR document during the comment period. The public comments received, and TCL's responses are detailed in **Appendix B. Appendix B** includes the comments, issues, and concerns raised by interested parties, community members, and the public during the public comment period (June 8 to July 23, 2020) and provides a response from TCL. The EAO working groups comments on the draft AIR and TCL's responses have been captured in a separate Issues Tracking Table that will be posted on EAO's e-PIC website.

Feedback and comments received by the public and working group on the Project were considered, and updates to the draft AIR document have been made. The following additions were always intended to be included in the EAA, however, they now explicitly appear in the draft AIR. These additions include:

1. Surface water quality model
2. Site water balance
3. Selenium Bioaccumulation model
4. Selenium Management Plan
5. Calcite evaluation
6. A revised Project Design / Alternative Means list

TCL received 178 comments with some comments in the form of multi-page letters attached to the online submission. Public comments on the draft AIR covered multiple subjects, with the most prevalent being water, fish and fish habitat, socio-economics, climate change, atmospherics, wildlife and caribou, geochemistry, engineering, and land use. **7** outlines the key public comments and concerns at a high level, including a brief response from TCL. **Appendix B** includes all public comments submitted as well as detailed responses from TCL

Table 7 Public Comment Period Topics

Topic	Public Concerns	TCL Summary Response
Water		
	▪ Changes to water quality and quantity ▪ Impacts to other IC/VCs as a result of changes to water (i.e., human health, wildlife, fish and fish habitat, recreation, etc.) ▪ Potential flooding of Bulkley River and Rail Infrastructure ▪ Requests the re-categorization of Surface Water and Groundwater from Intermediate Components to Valued Components	▪ Water quantity and quality are being evaluated with respect to the projected conditions and will consider a range of potential outcomes and water management strategies. Locations along Four, Tenas, and Goathorn Creeks, and Telkwa and Bulkley Rivers are being modeled and evaluated. Discharge locations and timing will be subject to government requirements. ▪ A water balance will be provided in the EA application that will detail expected water quality and quantity in surrounding watercourses, taking into account climate change, seasonal variations and water use by the Project. ▪ We agree that water is an important component. In response to feedback from the Office of the Wet'suwet'en and the public during the review of the draft Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate (pathway) Components (IC). ▪ We initially followed the Province of BC guidance. (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). ▪ To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only, even for pathway components. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.
Fish and Fish Habitat		
	▪ Changes to fish and fish habitat, including a potential decrease to populations ▪ Impacts to other IC/VCs as a result of changes to fish (i.e., human health, wildlife, recreation, socio-economics etc.)	▪ We agree that steelhead and salmon species form a critical part of the fabric that binds and support the community in the Bulkley Valley; and that healthy and stable water quality and quantity are fundamental to healthy aquatic ecosystems. ▪ We have invested many hours characterizing fish habitat and identifying fish use of aquatic habitats within, adjacent to and downstream of the project to enable an assessment of the potential effects of the project on aquatic ecosystems and their inhabitants. TCL's EA Application incorporates detailed water quality and quantity modeling. The water management strategies are designed to minimize changes to downstream water quality.

Topic	Public Concerns	TCL Summary Response
Socio-Economics		

	▪ Changes to employment and economic development
	▪ Potential changes to:
	  • Community wellbeing
	  • Local house prices
	  • Amenity migration
		▪ We are committed to creating long-term, sustainable economic and community benefits for the region. This includes hiring 170 full-time equivalent employees during peak operations.
		▪ Social and economic impacts of the Project will be assessed as part of the Economic Development VC, Infrastructure and Services VC and Community Well-Being VC effects assessments.

Climate Change		

	▪ Changes to climate change, including a potential increase in:
	  • Green house gases
	  • Unpredictable weather events
	  • Drought
	▪ Negative, long term, global environmental effects
		▪ We recognize the need to reduce emissions to help meet climate objectives.
		▪ The coal at the Tenas deposit is used for producing steel. Steel is widely used in every facet of our modern society including infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
		▪ Steel is essential for many green energy solutions that will help us address global climate change.

Air Quality		

	▪ Changes to air quality, leading to potential increase in:
	  • Dust
	  • Impacts to other IC/VCs as a result of changes to water (i.e., human health, wildlife, vegetation, fish and fish habitat etc.)
		▪ Dust emitting sources will be evaluated, and potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed, and mitigation measures applied, if necessary.
		▪ Dust deposition data will be provided to the health team and other disciplines to assess potential impacts on water, vegetation, and wildlife in the EA.

Wildlife		

	▪ Changes to wildlife, leading to potential decrease in:
	  • Health and populations
	  • Habitat quality and quantity
	▪ Impacts to other IC/VCs as a result of changes to wildlife (i.e., human health, vegetation, fish and fish habitat, recreation etc.)
		▪ The assessment will look at both direct and indirect effects of the Project to wildlife, and will include extensive modeling for each subcomponent species, as well as mitigation measures and wildlife-specific management plans to minimize potential impacts to wildlife.

Topic	Public Concerns	TCL Summary Response
Geochemistry		
	▪ Changes to water quality, leading to potential: ▪ Metal leaching creating elevated parameters ▪ Acid rock drainage creating elevated pH ▪ Impacts to other IC/VCs as a result of changes to geochemistry (i.e., human health, fish and fish habitat, vegetation, wildlife etc.)	▪ The geochemical characterization studies on this project is extensive with several programs and collection of hundreds of continuous samples from drill holes. These characterization studies have been used to develop a thorough understanding of where the Potentially Acid Generating (PAG) rock is located, so it can be segregated and managed appropriately. The mine will operate according to the Metal Leaching/Acid Rock Drainage management plan that is being prepared as part of TCL's EA Application. ▪ The models will predict changes to quantity and quality for a range of climatic scenarios (e.g., low flow and high flow) to bracket the range of prediction concentrations at downstream receptors. The model results will be inputs to the human health and aquatic life assessments.
Engineering		
	▪ Concerns regarding the dam and containment pond: • Safety of the dam storing potentially acid generating and non-acid generating rock • Monitoring of dams required in perpetuity, with climate change considerations • Liner composition and longevity ▪ Alternatives Assessment for project design	▪ The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis will be conducted to inform the development of a Mine Emergency Response Plan. The long term stability of the dam will consider resistance to large seismic events and extreme high rainfall and snowmelt events, which will be assessed in TCL's EA Application. ▪ We have assessed alternative means as a component of project planning and have developed a project description that includes measures to avoid and mitigate potential effects (mitigation-by-design). The list in the draft Application Information Requirements (AIR) includes project components where alternative means were assessed, and TCL's EA Application will provide the rationale for their selection.
Land Use		
	▪ Changes to land use, leading to potential: • Reduced outdoor recreation opportunities • Limited access to recreation sites beyond the Project	▪ A public access plan will be presented in the EA Application subject to government requirements. ▪ Public recreation is a considered as subcomponent under the Land and Resource Use Valued Component. It is also a considered as an indicator in infrastructure and services. The application of mitigation measures is part of the environmental assessment process, and will be considered accordingly in the assessments, including for these two valued components.

Topic	Public Concerns	TCL Summary Response
Caribou		

	▪ Changes to caribou, leading to potential:
	  • Decrease in health and populations
	  • Decrease in habitat quality and quantity
	▪ Cumulative effects to wildlife due to industry
		▪ The caribou assessment will include consideration of existing and historical disturbances. The assessment will focus on a quantitative, science-based approach using 20 years of telemetry and mortality data from the current population. This assessment will provide analyses of Telkwa Caribou Herd (TCH) data including habitat disturbance, mortality, movement, and sensory disturbance.
		▪ An assessment of cumulative effects will be conducted, which may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

3.3 Application Review Phase

The application review phase is initiated upon acceptance of the EA Application for review by the EAO. TCL is committed to continuing consultation and engagement over the course of the Project to communicate details on the proposed Project, the potential effects, proposed mitigation measures, and to seek feedback from the local community and interested parties on the Application submitted for the Project to the EAO.

The primary activities to occur in the application review phase will be similar to those carried out during the pre-application phase and include:

- Ongoing Engagement Activities
- Open Houses
- Tenas Mine Neighbours Group Meetings
- Information Program
- Public Comment Periods
  - Document Availability
  - Response to Comments
  - Public Consultation Reports

As the Project progresses, TCL will continue to employ engagement strategies that promote effective communication and relationship-building. The following sections describe future planned activities for the application review phase.

3.3.1 Application Phase Engagement Activities

It is important to note that the Application Phase of public consultation is a part of the overall continuum of engagement with the community and interested parties that began in early 2017 and will be ongoing throughout Project planning, construction, operations, decommission and reclamation, and post-closure.

In addition to the public comment period, an open house, a neighbours meeting, and Information Program, TCL will also conduct general engagement activities during the application review phase to communicate with interested parties and allow for open dialogue during this phase of the Project. Engagement activities that have been ongoing since the early engagement phase, include but are not limited to:

- **Open-Door Policy** – TCL has an open-door policy at our local Telkwa office. Community members are encouraged to stop by the office to speak with team members (including the CEO), as well as view open house poster boards that are on display and other information materials.

- **Meetings and Presentations** – TCL is committed to continuous engagement with the community and interested parties via in-person meetings, telephone calls, and emails to share Project information and ask Project-related questions.
- **Company Website** – Project updates and communication materials relevant to engagement will be posted on a company website.
- **Social Media** – TCL posts weekly to our Facebook and Twitter accounts. Content includes project information and updates, community events, communication, and information materials.
- **Site Tours** – TCL may hold additional site tours during the Application phase for interested parties who wish to view key areas of where site development will occur.
- **Participation at Community and Industry Events** – TCL participates in several local community and industry events, including the Telkwa BBQ, Bulkley Valley Exhibition, Northwest Trade Expo, and Smithers Chamber of Commerce meetings.
- **Sponsorship** - TCL has sponsored and contributed to several local organizations and activities, including establishing two signature community events, a Family Skating Party on Family Day in February, and a Summer Kick-off BBQ in June. The list below outlines all the community groups we have supported to date:

    - Bulkley Valley Bowmen
    - Bulkley Valley Food Bank
    - Bulkley Valley Hospital Foundation
    - Bulkley Valley Kinsmen (Telkwa BBQ)
    - Coast Mountain College
    - Dze L K'ant Friendship Centre in Houston
    - Smithers Curling Club
    - Smithers Exploration Group
    - Smithers Golf and Country Club
    - Smithers Rodeo Club
    - The Ark Playday Centre in Telkwa
    - Telkwa Elementary School
    - Telkwa Museum
    - Telkwa Reading Room

3.3.2 Tenas Mine Neighbours Group

TCL plans to hold a fifth neighbours meeting with the fifteen families with property and/or tenure in proximity to the Project during the application review phase. At this meeting, TCL will present an overview of our EA Application and provide an opportunity for neighbours to comment on the Project design, proposed mitigation measures, and potential Project-related effects.

3.3.3 Information Program

TCL's Information Program is a three-phased approach to share information with the community and interested parties on various topics related to the Project. As previously noted, the Information Program phases are as follows:

1. Phase 1 – Project and General Coal Bulletins
2. Phase 2 – Project-specific Infographics and Technical Briefs
3. Phase 3 – Potential Seminar Speaker Series on selected Phase 2 topics

The third phase of the Information Program will be a potential seminar series where TCL subject matter experts will present on a variety of topics. The seminar series is expected to occur during the application review phase and will be dependent on the level of community interest. The tentative seminar series topics are:

- About Coal
- Mining and Reclamation
- Selenium
- BC Water Quality Guidelines
- Caribou Biology
- Fish and Aquatic Resources
    - Bioaccumulation and Biomagnification
    - Environmental and Aquatic Effects Monitoring Programs; and
- Geochemistry

3.3.4 EAO-led Open House

It is anticipated that at minimum, one open house will be held during the application review phase. The open house will be held by the EAO to provide the local community and interested parties an opportunity to review the EAA. This will allow interested parties to provide comments on the Project design, proposed mitigation measures, and potential Project-related effects. The open house will likely occur during a respective 30-day public comment period. The EAO will also hold a 30-day public comment period for the Assessment Report (AR).

TCL will develop several poster boards or power point presentation, depending on provincial health guidelines at the time for the open houses during the application review phase that will provide an overview of TCL's EAA. The community open houses during the application review phase will be advertised via the following:

- Smithers Interior News
- The Moose FM
- CFNR Radio

3.3.4.1 Public Comment Periods

In accordance with the requirements set out in the Section 11 Order for the Project, the EAO will provide a public comment period of at least 30 days for the Application for an EAC. During the application review phase public comment period, the Application will be made available to the public through the following means:

- The EAO will make the Application available in electronic format on the EAO e-PIC website.
- A paper copy of the Application will be available at an undefined local location (See **Section 3.35.1** for potential document availability locations).
- Electronic copies will also be made available at the open house held during the application review phase.

The public comment period for the Application will be advertised via the following:

- Smithers Interior News
- The Moose FM
- CFNR Radio

Advertisements posted in local newspapers will be prepared according to specifications provided by the EAO and will include a brief outline of the proposed Project and the EAA. The advertisements also will also provide details on the public comment period, the open house, and contact information for providing comments to the EAO.

The EAO requires a public comment period on the EAO's draft AR and proposed conditions of an EAC. The EAO will be responsible for posting the draft documents and responding to public comments. TCL will participate in this public comment period as directed by EAO.

3.3.4.2 Document Availability

The Application will be made accessible to the public and interested parties in both electronic and paper copies to facilitate opportunities for the local community and interested parties to review the Application and provide feedback. Electronic copies of the Application will be made available by the EAO on the e-PIC site. A paper copy of the Application will be available at the TCL Telkwa Office and other locations as required by the EAO.

3.3.4.3 Response to Comments

TCL is required under the Section 11 Order to respond to public comments received on the Application. TCL's responses to public comments will be provided to the EAO for review prior to finalization and posting to e-PIC. Comments received from the public will be posted to e-PIC by the EAO within seven days of being received. All consultation-related communications will be tracked over the Application phase and TCL will respond to each comment received in writing.

3.3.4.4 Public Consultation Reports

TCL will continue to document and log all consultation and engagement activities during the application review phase of the Project. Public Consultation Reports are also required under the procedural Section 11 Order during the application phase, and similar to the pre-application phase, will include:

- Description of the results of any consultation activities undertaken during the application review phase, as described in this Public Consultation Report
- Summary of the following:
    - Consultation with the local community and interested parties
    - Copies of advertisements or public communications used during the application review phase
    - Information, comments, concerns, and questions received from the public
    - Information on how the comments, concerns, and questions received from the community will be considered in Project planning.
- Outline steps for on-going and future consultation and engagement activities.

As part of the application review phase, Public Consultation Reports will be developed and provided to the EAO at the time the Application is submitted.

3.4 Ongoing Engagement

TCL is committed to creating and maintaining opportunities for constructive dialogue and relationships with the local community and other interested parties over the course of the Project. Should the Project be successful in receiving an EAC, consultation and engagement post-EAC and prior to construction of the Project and during operations will include:

- **Open-Door Policy** – TCL has an open-door policy at our local Telkwa office. Community members are encouraged to stop by the office to speak with team members (including the CEO), as well as view open house poster boards that are on display and other information materials.
- **Meetings and Presentations** – TCL is committed to continuous engagement with interested parties via in-person meetings, telephone calls, and emails to share Project information and ask Project-related questions.
- **Company Website** – Project updates and communication materials relevant to engagement will be posted on a company website.
- **Social Media** – TCL posts weekly to our Facebook and Twitter accounts. Content includes project information and updates, community events, communication, and information materials.
- **Site Tours** – TCL may hold additional site tours for interested parties who wish to view key areas of where site development will occur.

- **Participation at Community and Industry Events** – TCL participates in several local community and industry events, including the Telkwa BBQ, Bulkley Valley Exhibition, Northwest Trade Expo, and Smithers Chamber of Commerce meetings.
- **Sponsorship** - TCL has sponsored and contributed to several local organizations and activities, including establishing two signature community events, a Family Skating Party on Family Day in February, and a Summer Kick-off BBQ in June. The list below outlines all the community groups we have supported to date:

    - Bulkley Valley Bowmen
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    - Smithers Curling Club
    - Smithers Exploration Group
    - Smithers Golf and Country Club
    - Smithers Rodeo Club
    - The Ark Playday Centre in Telkwa
    - Telkwa Elementary School
    - Telkwa Museum
    - Telkwa Reading Room

4. SUMMARY OF PUBLIC ISSUES AND CONCERNS RAISED

TCL will maintain a log of all communications with the local community and interested parties over the course of the Project. As per the Section 11 Order, all comments received during the public comment periods will be tracked and responded to in writing by TCL. Information will be provided to the EAO as part of the Public Consultation Reports, or at any time if requested.

A key part of community engagement is identifying and understanding community and interested parties Project concerns. In this spirit, TCL is committed to continuing to create and facilitate opportunities for the local community and interested parties to provide meaningful input and feedback on the Project. TCL will manage and maintain a tracking document for issues brought forward by the public during consultation and engagement activities. This approach allows TCL to gather input and feedback on the Project from the local community and interested parties and ensure it is considered during Project planning. It is TCL's intention that this method of public consultation will foster strong, collaborative, and long-term partnerships with regulators, community groups, and other interested parties. **Table 8** summarizes the list of open houses for the Tenas Project.

Table 8 Summary of Open Houses

Open House Number	Year	Date	Phase	Hosted By	Attendance
1	2018	May 23, 2018	Early	TCL	120
2		November 28, 2018	Pre-Application		150
3	2019	November 7, 2019			100
4	2020	June 17, 2020		EAO	150
5		June 23, 2020			

Table 9 provides a summary of public issues and concerns raised in the early and pre-application phases. Through extensive engagement with the local community and interested parties, TCL has identified these issues and will consider these in the EA Application. For a detailed account of the issues raised and our responses, refer to **Section 3.1, 3.1.2, 3.1.3, 3.1.5, 3.2.2, 3.2.4, and 3.2.5.**

Table 9 Summary of Public Issues and Concerns

Public Concern	TCL Summary Response
Water	▪ Water quantity and quality are being evaluated with respect to the projected conditions and will consider a range of potential outcomes and water management strategies. Locations along Four, Tenas, and Goathorn Creeks, and Telkwa and Bulkley Rivers are being modeled and evaluated. Discharge locations and timing will be subject to government requirements. ▪ A water balance will be provided in the EA application that will detail expected water quality and quantity in surrounding watercourses, taking into account climate change, seasonal variations and water use by the Project.
Fish and Fish Habitat	▪ We agree that steelhead and salmon species form a critical part of the fabric that binds and support the community in the Bulkley Valley; and that healthy and stable water quality and quantity are fundamental to healthy aquatic ecosystems. ▪ We have invested many hours characterizing fish habitat and identifying fish use of aquatic habitats within, adjacent to and downstream of the project to enable an assessment of the potential effects of the project on aquatic ecosystems and their inhabitants. ▪ TCL's EA Application incorporates detailed water quality and quantity modeling. The water management strategies are designed to minimize changes to downstream water quality.
Climate Change	▪ We recognize the need to reduce emissions to help meet climate objectives. ▪ The coal at the Tenas deposit is used for producing steel. Steel is widely used in every facet of our modern society including infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
Dust	▪ Dust emitting sources will be evaluated, and potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed, and mitigation measures applied, if necessary. ▪ Dust deposition data will be provided to the health team and other disciplines to assess potential impacts on water, vegetation, and wildlife in the EA.
Wildlife	▪ The assessment will look at both direct and indirect effects of the Project to wildlife, and will include extensive modeling for each subcomponent species, as well as mitigation measures and wildlife-specific management plans to minimize potential impacts to wildlife.
Caribou	▪ The caribou assessment will include consideration of existing and historical disturbances. The assessment will focus on a quantitative, science-based approach using 20 years of telemetry and mortality data from the current population. This assessment will provide analyses of Telkwa Caribou Herd (TCH) data including habitat disturbance, mortality, movement, and sensory disturbance.
ARD	▪ The Project has an extensive geochemical dataset to enable the development of a detailed ARD/ML Management Plan. ▪ The geochemical characterization studies on this project is extensive with several programs and collection of hundreds of continuous samples from drill holes. These characterization studies have been used to develop a thorough understanding of where the Potentially Acid Generating (PAG) rock is located ,so it can be segregated and managed appropriately. ▪ The mine will operate according to the Metal Leaching/Acid Rock Drainage management plan that is being prepared as part of TCL's EA Application.

Access to Recreation	▪ A Public Access Plan will be presented in the EA Application subject to government requirements. ▪ Requirements are set by the provincial government in the regulatory process. We support continued access to recreational opportunities and will work with local stakeholders to minimize potential impacts and maintain controlled and specified access plans, in line with government land use requirements.

APPENDIX A OPEN HOUSE AND PUBLIC COMMENT PERIOD FLYER

Telkwa Coal's 4th Open House will be EAO-led, and will outline the draft Application Information Requirements (dAIR) document. The dAIR is a checklist of information required for the Tenas Project's Environmental Assessment (EA) Application.

Please join us to learn more about the environmental, social, and cultural components of our EA. The public EAO comment period for the Tenas Project will run from June 8 to July 23, 2020.

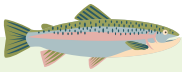
Virtual Open Houses: June 17, 1-3pm PST and June 23, 5-7pm PST

For more information on how you can participate in the virtual Open Houses and public comment period, visit our social media accounts or the Tenas Project's EAO website. Click here.

info@allegiancecoal.com.au facebook.com/telkwacoal twitter.com/telkwacoal
778.643.2843 Main Office: 1415 Hankin Avenue, Suite D Telkwa, BC V0J 2X0

These are the components we have been studying and will assess for our EA application.

	COMPONENT	SUBCOMPONENTS
ENVIRONMENT	Fish and Fish Habitat	
	Aquatic Resources	
	Wildlife	Marten, Wolverine, Caribou, Grizzly Bear, Moose, Bats, Western Toad
	Avian Species	Migratory Breeding Birds Listed Bird Species Raptors
	Atmospheric Environment	Air Quality Greenhouse Gas (GHG) Emissions Noise
	Vegetation	Old Growth Forest and Wetlands Listed Ecological Communities Culturally Important Species Rare Plants and Lichens
	Terrain and Soils	Soil Quality Terrain Stability
	Surface Water	Surface Water Quantity and Quality
	Groundwater	Groundwater Quantity and Quality
SOCIAL	Labour Market	
	Economic Development	Local Business and Industry
	Infrastructure and Services	Housing and Accommodation Community Infrastructure and Services Transportation
	Land and Resource Use	Commercial Land Use Public Recreation Use Current Use of Land and Resources for Traditional Purposes
	Community Well-being	
	Demographics	
	Visual Resources	Visual Quality, Ambient Light
	Heritage Resources	Archaeological Resources Historic and Cultural Sites
	Human Health	











APPENDIX B PUBLIC COMMENT PERIOD ON DRAFT APPLICATION INFORMATION REQUIREMENTS

Date:	24-Mar-21		
Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-01	Anonymous, Telkwa BC	Telkwa Coal is a great opportunity for the economy and by hiring local it creates the feeling of community which is desperately needed in this area. By hiring local the employees will be invested into the project and Telkwa. Thanks for this opportunity to submit my comment.	Thank you for your comment. We appreciate your support of the Tenas Project.
IR-01-02	Anonymous, Telkwa BC	The telkwa coal project is a great boost to a small northern community. Within our area we have so many resources and consultants, this project will employ many people outside of direct workers. The company has put forth what I feel is honest information, has maintained an open door policy for questions and concerns. Given the current global crisis's having an operating mind in our community will boost jobs, spotlight local environmental protection policies and provide an economic boost locally.	Thank you for your comment. We appreciate your support of the Tenas Project.
IR-01-03	Anonymous, Telkwa BC	I am concerned about the procedure of virtual open houses. I realize this is a difficult time but I do not think that this is a fair way of informing the public about the dAIR. Not everyone has decent internet (especially up North here) and there are still a lot of older people who are not on the internet at all, and will not get enough information. Another issue with everything being online is that for accessing documents and making public comments, your website is only supported by googlechrome and firefox. I would like to see the EAO hold a proper open house, with limited people allowed in, and, of course, in accordance with the Covid regulations. There are so many impacts that a coal mine this size could have on our valley, I feel it is important that everyone can have their say.	Due to the COVID-19 pandemic and provincial health guidance, it was necessary for the Environmental Assessment Office (EAO) to adjust the format of the open house. In recognizing the change to the virtual format, the EAO made several accommodations; hosting two open houses instead of one, extending the public comment period from 30 days to 45 days, having the events on different days of the week (Tuesday and Wednesday) and also during different times of day (1-3 pm and 5-7 pm) to include as many people as possible. Comments were not limited to the open house event days. The EAO allowed public comments for 45 days. TCL will address every question posted by the public on the EAO website. TCL also held three in-person open houses in 2018 and 2019 in advance of the virtual ones in 2020. And, the community is always welcome to visit our Telkwa office to review the many project boards and infographics with our Telkwa-based team.
IR-01-04	Anonymous, Prince Rupert and Terrace BC	I'd like to see a detailed community outreach explaining the potential damages to drinking and river water. I think that is a reasonable request.	There will be another open house during the next phase of the Environmental Assessment process when the Environmental Assessment Office reviews TCL's Environmental Assessment Application. In addition, we will hold community meetings to review the results of the assessments, including those related to water.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-05	Anonymous, Telkwa, BC	I think Telkwa Coal needs to happen. It would do so much for the community. My Grandfather and Father both worked for Telkwa Coal back in the day. It would mean so much to see my son have the opportunity to work for Telkwa Coal and stay in the community instead of moving somewhere else. We love Telkwa and would love to see Telkwa Coal invest in our community. Thanks so much.	Thank you for your comment. We appreciate your support of the Tenas Project.
IR-01-06	John Mainland, Vancouver, BC	Please reject the application for the Tenas Coal mine since it will disrupt wild salmon migration and spawning corridors essential to their survival. thanking you in advance.	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the Environmental Assessment (EA) Application. As described in the draft AIR section 4.6, fish and fish habitat existing conditions, potential effects, mitigation measures and a follow-up strategy will be addressed in the EA Application. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-07	Anonymous, Telkwa, BC	In Allegiance's Investor Presentation May 2020, page 8 states as a Production Plan: Commence at 750kctpa ramping to 1.35Mctpa in year five. I cannot understand why this project is not under Federal Review from the beginning. I realize another assessment will be made then but a mine that is already running would be very unlikely to be denied more production. I think they should have to be assessed federally.	Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement. Please note that the Environmental Assessment Office Working Group includes several federal representatives from Environment and Climate Change Canada.
IR-01-08	Anonymous, Port Coquitlam, BC	The Government needs to do everything possible to ensure the water and salmon are effective negatively by the mine, no matter what the cost.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, water (sections 4.3 and 4.4) and fish and fish habitat (section 4.6) will be addressed in TCL's EA Application.
IR-01-09	Anonymous, Smithers, BC	No to this project in our back yard we have messed with our environment enough!!!	Thank you for your perspective. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-10	Anonymous, Smithers, BC	During the first virtual open house, there was not enough time (only one hour) allocated for questions and answers with the EAO and mining company. Not all public questions were addressed. I expect it will be the same for the next open house. I suggest the next open house either be extended to provide additional time for questions and answers, or a third open house be planned. Given the inability to offer in-person open houses, a mere two hours for all interested community members to air concerns and obtain information they need to provide informed feedback on this project is insufficient.	Due to the COVID-19 pandemic and provincial health guidance, it was necessary for the Environmental Assessment Office (EAO) to adjust the format of the open house. In recognizing the change to the virtual format, the EAO made several accommodations; hosting two open houses instead of one, extending the public comment period from 30 days to 45 days, having the events on different days of the week (Tuesday and Wednesday) and also during different times of day (1-3 pm and 5-7 pm) to include as many people as possible. Comments were not limited to the open house event days. The EAO allowed public comments for 45 days. TCL will address every question posted by the public on the EAO website. TCL also held three in-person open houses in 2018 and 2019 in advance of the virtual ones in 2020. And, the community is always welcome to visit our Telkwa office to review the many project boards and infographics with our Telkwa-based team.
IR-01-11	Anonymous, Telkwa, BC	I think trading jobs and economic benefits for the environment is antiquated and backward thinking. There is no amount of environmental assessment or approval certification that will make this project environmentally sound. Water, fish, noise pollution and air quality (coal dust) is not worth the risk. It is time to change for the future. Also, what accountability will an Australian company have in the long term stewardship of this project?	The purpose of the draft Application Information Requirements (draft AIR) is to provide a checklist of information that is required in TCL's Environmental Assessment (EA) Application, which is needed to receive an Environmental Assessment Certificate, under the 2002 BC Environmental Assessment Act. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. Specifically in the draft AIR, see section 4.1 for atmospheric environment, sections 4.3 and 4.4 for water, and Section 4.6 for fish and fish habitat. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-12	Anonymous, Prince Rupert, BC	(1/2) I am very concerned regarding this project and the impact it will have to the salmon stocks on the Telkwa, and therefore the Skeena River, as well as on neighbouring communities and communities downriver (or upriver) that will feel direct impacts from this project. Of major concern is the that this coal mine has informed the BC govt that they wish to continue to be assessed under the Environmental Assessment Act (2002). How is the proponent allowed to make this decision to be assessed under old regulations while 2 years ago the regulations changed? The new regulations are below. Does this mean that none of these issues in the 2018 regulations are going to be assessed/followed? These new 2018 regulations make it clear that local communities and government are to be meaningfully involved in a transparent process. Since 2002 regulations are being chosen by the coal mine, one can only assume that local communities and government will have very little input in a non-transparent process, and that valid concerns about health and safety both to humans and the environment, as well as fish stocks in the Skeena River and the impact to the marine life at the mouth of the Skeena River (which is an amazingly rich and diverse feeding zone for fish and marine mammals) will not be adequately considered throughout the EA process.	Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment. The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of the EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). We are following the environmental assessment process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local government, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. Our project has been under the 2002 *Environmental Assessment* (EA) *Act* since November 2018. The new EA Act only came into force, with regulations, in December 2019, more than a year after our work with the EAO began. While we have elected to continue with the original process, we have always strived to exceed public consultation requirements. As an example, we have already held more open houses than what is required. Through that early public engagement, we have made material changes to our project in direct response to the local community, such as building a Bypass Road. We will continue to strive to exceed the public consultation requirements - even for the new EA Act. Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. Our commitment is to continue to follow the process the Office of the Wet'suwet'en have set out for us, present a plan, answer questions and address concerns.
IR-01-12	Anonymous, Prince Rupert, BC	(2/2) On November 27, 2018, the Province of British Columbia (B.C.), following extensive engagement, passed a new Environmental Assessment Act (2018) (Act) with the goals of: • Enhancing public confidence by ensuring impacted First Nations, local communities and governments and the broader public can meaningfully participate in all stages of environmental assessment (EA) through a process that is robust, transparent, timely and predictable; • Advancing reconciliation with First Nations; and • Protecting the environment while offering clear pathways to sustainable project approvals by providing certainty of process and clarity of regulatory considerations including opportunities for early indications of the likelihood of success.	

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-13	Robert Beemer, Jackpine Road, Telkwa, BC	I am concerned that Elk have not been included as a wildlife subcomponent, as per section 4.8 . As I am able to see cow and calve elk everyday from my kitchen window on Jackpine Rd, I am concerned about the effects to their movement once the coal haul road is built and in use. A species standing on of off the endangered species lists should not be a reason to ignore their welfare.	Elk was not carried forward as a subcomponent due to the low potential for interaction with the Project. Potential project effects on ungulates will be assessed through the assessment of effects on caribou and moose (section 4.8 of the draft Application Information Requirements).
IR-01-14	Robert Beemer, Jackpine Road, Telkwa, BC	I have concerns regarding Helps Creek wetlands. Since the coal haul road will be in the Helps Creek watershed for 7 km I think this wetland and creek should be getting the same consideration as Four and Goathorn Creeks. My concerns here are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek.	As detailed in section 4.7 of the draft Application Information Requirements (AIR), wetlands will be assessed as a subcomponent of the Vegetation Valued Component. The Vegetation Local Study Area (LSA) includes the wetland complex downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. Furthermore, potential effect of changes to surface water quality within Helps Creek will be assessed within the Surface Water component (section 4.3). Helps Creek has been included within the Surface Water LSA, which has been delineated to account for potential changes to surface water quantity and quality, and baseline surface water quality data has been collected within Helps Creek to inform the assessment. Dust suppression methods will be included in the air quality management plan developed for the Project per section 13.0 of the draft AIR and the Discharge Management Plan will specify appropriate location and intervals for monitoring.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-15	Raymond Chipeniuk, Smithers, BC	(1/3) Here, I am making just a highly abbreviated comment on the draft Application Information Requirements (AIR) for the Tenas Project. I will try to find the time to send Ms Heather Noble. Project Assessment Director, more detailed comments by paper mail. (1) My main comment on the draft Tenas AIR is that on my quick reading, at any rate, they completely omit specific undertakings to gather information on the impacts the Project would have on AMENITY MIGRATION into Smithers, Telkwa, and the Regional District of Bulkley-Nechako. Amenity migration (in the strong sense of permanent in-migration of new residents into a place principally on account of its natural and cultural amenities rather than for a job or business opportunity) is well established in the regional planning literature as being of major importance in sustaining prosperous and socially vital communities in western North American mountain regions. The central Bulkley Valley is a community of this kind, with a large fraction of its permanent residents being amenity migrants drawn by the high quality of the natural environment ; and the central Valley makes a striking contrast with settlements elsewhere in northern British Columbia which have undergone cycles of poorly designed resource extraction without attention to project effects on amenity migration.	We recognize the amenity features that make the Bulkley Valley a desirable place to live for current and potential future residents, including many of the natural and cultural amenities identified by the comment. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR (sections 4.0 to 14.0), TCL's EA Application will address many of the natural and amenity features valued in Telkwa and the Bulkley Valley, including visual quality, noise, effects on fish and wildlife, opportunities for (and quality of) recreation and other land use, and overall sense of community well-being. Project-related effects to demographics comprise one of the steps along the pathways of effects of the Project, with other Valued Components (VC) being the ultimate receptors of those effects. In accordance to Environmental Assessment Office (EAO) guidance, demographics was originally designated as an Intermediate Component (IC) (draft AIR section 6.1) in the context of potential effects of the Project on changes in populations in affected Local Study Area (LSA) and Regional Study Area (RSA) communities in relation to Infrastructure and Services; Land and Resource Use; Community Well-Being; Labour Market; and Economic Development (draft AIR sections 6.3, 6.4, 6.5, 5.1, 5.2). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only, even for pathway components. Demographics component will now be assessed as a VC and will present an evaluation of changes to

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IR-01-15	Raymond Chipeniuk, Smithers, BC	(2/3) A large resource extraction project can decide local amenity migrants to move elsewhere; it can decide prospective amenity migrants to avoid settling in a place; it can weaken resident identification with place and in so doing undermine environmental citizenship; it can contribute to the emergence of a "company town" political culture. By discouraging amenity migration, a large resource extraction project can gradually drive down property values and promote flimsy construction. It can counteract local economic diversification and weaken the stability of district economies exposed to wild swings in export markets. A large resource extraction project can transform an amenity-rich district to one which has difficulty attracting and retaining professionals such as medical doctors. I know what I am talking about. I am a retired professor of environmental planning with a Ph.D. in Regional Planning and Resource Development, and I have lived in the Bulkley Valley for 22 years. As an environmental planning professor at UNBC, I published a series of peer-reviewed research journal articles on amenity migration, several of them based on field studies in the Bulkley Valley. While Visual Quality analysis and some of the other kinds of studies outlined in the Tenas draft AIR are worth conducting, they are relatively simple minded as methods of ascertaining the potential effects of a project such as Tenas on amenity migration. Many of the natural and outdoor cultural amenities of a mountain settlement complex such as the central Bulkley Valley are cognitive, not visual.	population and other identified demographic factors within the boundaries for assessment for these socio-economic VCs and along pathways which potential Project-related effects could occur, with cross references to other supporting VC assessment sections. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Migration into an area may occur due to a range of potential social and economic opportunities. These opportunities may include amenity migration. Potential Project effects related to migration into the selected LSA and RSA will be considered in assessment of the Community Well-Being VC. The assessment will consider potential changes as they relate to the communities and economy of the LSA and RSA (including existing state and future plans as described in local and regional planning). While outside the scope of the draft AIR, it is worth noting in this context is the relative scale of the proposed Project. The Project does not plan to operate the Tenas mine under Fly In Fly Out (FIFO) arrangements, and in comparison to other mines in the region the planned workforce is relatively small. Commitment to specific mitigations is outside the scope of the AIR.

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IR-01-15	Raymond Chipeniuk, Smithers, BC	(3/3) It may be that the injuries the Tenas project could impose on the socio-economic sustainability of the Bulkley Valley cannot be avoided or significantly mitigated overall. In that case perhaps the proper "mitigation" would be environmental compensation via the development of major new semi-natural amenities under a No Net Loss framework. For example, Telkwa Coal Ltd. could be required to endow a body resembling the Columbia Basin Trust, although on a smaller scale. Grants from the trust could then be allocated specifically to building institutional arrangements and facilities comparable in amenity migration appeal to the natural amenities the Tenas project will diminish or destroy. For instance, a Tenas Trust fund might support an annual nature festival. It might cover the cost of maintaining a repository of accounts of local natural history, the cost of annual tracking of the arrival and departure of amenity migrants to and from the central Bulkley Valley, the cost of acquiring planning recommendations concerning amenity migration from such independent consultants as Headwaters Economics, and the cost of improved recreational access to alpine (maybe even a gondola running to the top of Astlais Mountain). (2) Undoubtedly, many of the employees of a Tenas mine will work under Fly-in, Fly-out (FIFO) arrangements. FIFO can be good or bad for the socio-economic welfare of a local community, or both good and bad. In scanning the Tenas AIR materials, I see no mention of assessment of FIFO impacts. If FIFO has been overlooked, it should not be. Furthermore, in this day and age, potential FIFO arrangements should be scrutinized from the point of view of the carbon emissions they would generate.	
IR-01-16	Anonymous, Jackpine Rd, Telkwa, BC	I am deeply concerned with the Tenas coals plan to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas coal intends to store the wash coal on the ground this land will be polluted for years and the only way to clean it will be to remove the soil.	Thank you for your perspective. It is important to note that the land will not be removed from the Agricultural Land Reserve (ALR). We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. The draft Application Information Requirements section 13.0 will include the Reclamation and Closure Plan.

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IR-01-17	Anonymous, Jackpine Rd, Telkwa, BC	I am concerned with the location of the coal loadout facility. This site is on floodplain as per the Regional Districts map viewers. I for one have seen this land flooded. The potential is there for flood waters to wash stored coal into the Bulkley River. This site should be moved off of the flood plain.	The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, the terrain assessment will be in section 4.2 while the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles and section 3.5 will outline mitigations, as required. Several recent independent, comprehensive, peer-reviewed studies related to the ecological effects of residual coal due to accidental derailments conducted over the past indicate that coal has minimal long term residual environmental effects to aquatic organisms in fresh water. Refer to study at the following link: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/spills-and-environmental-emergencies/docs/2015-final-burnaby-lk-aia.pdf
IR-01-18	Anonymous, Jackpine Rd, Telkwa, BC	I am deeply concerned with the location of the coal loadout facility. This site is not only on floodplain and in the ALR but it will be within site of the Hwy 16 pullout and viewpoint just south of Telkwa. Needless to say piles of coal waiting to be loaded will be a eyesore and send a bad message regarding the Bulkley Valley.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, the terrain assessment will be in section 4.2 while the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles and section 3.5 will outline mitigations, as required. The effects of the rail infrastructure on views of the Bulkley Valley landscape will be addressed in the Visual Resources chapter of TCL's EA Application (section 6.2 of the draft AIR). The area of the loop is already partially obscured by existing trees, and potential mitigations, such as planting trees, may be considered in the EA Application. Several recent independent, comprehensive, peer-reviewed studies related to the ecological effects of residual coal due to accidental derailments conducted over the past indicate that coal has minimal long term residual environmental effects to aquatic organisms in fresh water. Refer to study at the following link: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/spills-and-environmental-emergencies/docs/2015-final-burnaby-lk-aia.pdf
IR-01-19	Anonymous, Jackpine Rd, Telkwa, BC	I am concerned with the ability of Telkwa coal to contain dust at their coal loadout. Telkwa coal does not intend to keep any of their piles under cover. They claim they will spray them with something (latex) to keep the dust down. As these piles will be stirred hourly by equipment I think the use of chemical covers will be of marginal benefit. Just the dumping of coal from the haul trucks will create dust also the use of front end loaders to load the coal cars will create a lot of dust compared to a proper coal tipple with dust suppression.	Dust generation from mining activities will be assessed including the placing of material on stockpiles (draft Application Information Requirements section 4.1). Mitigation measures (such as keeping drop heights low) and contingency measures will be considered, as required. Other potential measures for consideration include spraying agents on stockpiles, and adding agents to the coal prior to being placed into the stockpiles to assist with fugitive dust emissions from the emptying of trucks and the use of loaders.

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IR-01-20	Anonymous, Jackpine Rd, Telkwa, BC	Why in this day and age are we even considering opening a coal mine. Tenas coal is owned by Allegiance coal whose stock is presently trading on the Australian stock Exchange for 7 cents. Is this the type if company we should risk our water and land resources on.	The coal in the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation, communications, and energy generation (wind turbines). Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required by the Government of British Columbia to post a financial reclamation bond prior to mining.
IR-01-21	Thomas Roper, Telkwa, BC	Canada was involved in export of asbestos for 75 years before it became unacceptable to export a highly contaminated product. in light of the world concern for reduced carbon output are we prepared to continue to export pollution for profit? there are several coal mines in production in b.c. that are involved in the exporting of pollution around the world. this company, allegiance coal, states that this particular coal is needed for steel production in japan. when is it time to state that we have enough coal mines in production and we do not need to approve any further coal mines in our attempt to reduce our carbon output?	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Asbestos and coal are not analogous as the potential effects of the two substances differ chemically, physically and toxicologically. Specifically, exposure to asbestos can result in cancers and other diseases, including mesothelioma and asbestosis. While it is true that asbestos export has been controlled, its use is still allowed, as long as it comprises less than 1% of exported products. Metallurgical coal, in the form that it is exported, has not been shown to cause health effects.
IR-01-22	Thomas Roper, Telkwa, BC	on page 17 of the d'air document, 1.4 alternatives to proposal project, the statement " telkwa coal is a junior mining company with very limited project holdings, there are no viable technically and economically feasible projects available to telkwa coal within canada. this statement affirms the reality that telkwa coal does not have the resources to mitigate a mining disaster similar to imperial metals, mt. polley. their goal, realistically would be to develop and sell their assets to a larger player. could you address that statement and explain what will the bond be for a potential disaster and closure reclamation?	We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

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IR-01-23	Thomas Roper, Telkwa, BC	the e.a.o. process concentrates primarily on various mitigation processes. as this is the 3rd or 4th attempt over the past 30 years at development of the telkwa coal fields, the major concern is what will happen to the watershed? what will happen to the fish? what will happen to our telkwa life style? presently we have a good lifestyle which begs the question " why mitigate perfection" we have a small run of coho and steelhead. why risk the fish? the telkwa river is one of the largest tributary of the bulkley and the skeena rivers and any contamination of the water will have devastating effects on those ecosystems, why or how could we contemplate that risk. this junior company, telkwa coal, is prepared to risk for short term profit gain and then disappear when we have the long term pain of water contamination. my question is how, specifically, will telkwa coal treat the chemicals used in the flotation process and how will we be assured that the water returned to the telkwa watershed is as perfect as it is now?	Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. We are committed to developing the Project in a safe and environmentally responsible manner. For your reference, the chemicals used in the flotation process will bind to the coal to improve its flotation ability and stay with the coal through to the customer.
IR-01-24	Thomas Roper, Telkwa, BC	telkwa coal has stated that they will build a containment pond roughly the size of tyee lake and put all potential acid generating rock in there to be covered with water from now until the end of time. dan farmer used the word forever at the last virtual meeting. he also stated that the dam structure will be built to "best practices". however, unfortunately, mining best practices have resulted in containment failures whether man-made or natural. my question is, how could any company even consider planning for the end of time? and how could any company set up a dam 7 kilometres from a community they profess to care about when the rate of potential failure is eminent?	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to inform the development of a Mine Emergency Response Plan (section 13.0). Final closure of the facility will include capping the Potentially Acid Generating (PAG) rock with non acid generating rock and then placing a soil cover on the surface, while maintain water levels high enough to keep the PAG rock saturated. The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0).
IR-01-25	Anonymous, Smithers, BC	I am deeply concerned about this project and believe it should not be approved. The risks to the watershed, the salmon, the wildlife, and the environment in general are too high for such a low reward. Coal is not the future; stop investing in it as if it was.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

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IR-01-26	Thomas Roper, Telkwa, BC	i have spent half of my career in mining and have benefited financially from that. i have also been there to see disasters first hand. during my time at huckleberry mine, an imperial mine company, i watched the east pit high wall collapse from water saturation. the pit had been evacuated but several pieces of equipment were trapped and buried. in the winter of 2009 we had a record snowfall of 34 ft. and the spring freshet was so intense there was a potential of dam collapse. the company was given permission to dump off tailings water into the reach to relive the excess pressure on the dam. these examples are considered natural disasters and were mitigated to some extent by being 120 kilometers from civilization. the effects on the water supply could be considered minimal. these natural disasters can occur and the effect on a town 7 kilometers from the minesite could and will be devastating. my question, is telkwa coal prepared financially, ethically and morally to deal with this type of disaster. is the short term financial gain worth the risk of the loss of the community and its watershed.	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to inform the development of a Mine Emergency Response Plan which will include disaster preparedness (section 13.0). The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0). Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-27	Anonymous, Jackpine Rd, Telkwa, BC	Since the coal haul road is in the Helps creek watershed I for 7 km I think there should be a water monitoring station on this creek.	This public comment period is focused on the draft Application Information Requirements (AIR) and not TCL's Environmental Assessment (EA) Application. Helps Creek is within our study area and we have collected background water quality data. As per section 13.0 of the draft AIR, the Discharge Management Plan will outline monitoring plans.
IR-01-28	Anonymous, Jackpine Rd, Telkwa, BC	As per dAIR 4.3 and 4.4, how can groundwater and surface water be intermediate components and fish and habitat be valued components. Water is the key to life and should be the most valued component.	In response to feedback from the Office of the Wet'suwet'en and the public during the review of the draft Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate (pathway) Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only, even for pathway components. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.

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IR-01-29	Anonymous, Jackpine Rd, Telkwa, BC	I am very concerned about Tenas coal desire to build a lake 2 km long on this plateau between Four and Goathorn creeks. This lake will be approximately 500 meters above the valley floor at Telkwa and is a threat to the village and anyone living near the Telkwa and Bulkley rivers downstream of the junction of the two rivers.	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to inform the development of a Mine Emergency Response Plan (section 13.0). Final closure of the facility will include capping the Potentially Acid Generating (PAG) rock with non acid generating rock and then placing a soil cover on the surface, while maintain water levels high enough to keep the PAG rock saturated. The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0).
IR-01-30	Anonymous, Jackpine Rd, Telkwa, BC	I am concerned with Tenas coal construction of a large lake approximately 2 km long to store their Potential acid generating rock, (PAG). Has any consideration been taken into the seismic nature of this land and the weight of a new lake sitting on top of it. If this lake goes dry or a dam fails all the PAG will be exposed to the environment.	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. The dam design will have a very low probability of failure with additional contingencies built into the construction and operation of this facility. In addition, a dam break analysis (section 9.0) will be conducted to inform the development of a Mine Emergency Response Plan (section 13.0). A site water balance will be included in TCL's Environmental Assessment (EA) Application. The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's EA Application (section 10.0).
IR-01-31	Anonymous, Jackpine Rd, Telkwa, BC	I have concerns regarding the lake that Tenas coal intends to build to store the PAG. They have suggested they will line the bottom of this lake to seal in the acid water. What will they use and has it been tested in this way.	The Acid Rock Drainage/Metal Leaching Management Plan (draft Application Information Requirements [dAIR] section 13.0) includes management practices intended to minimize acid generation by submerging the material underwater. We are considering a variety of liners to limit seepage levels from management ponds. The liner is not intended to prevent all seepage but rather to reduce it to a rate that maintains a positive water balance for the ponds and ensure the Potentially Acid Generating (PAG) rock is covered by water.

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IR-01-32	Len Vanderstar, Bulkley Valley, BC	(1/3) Greetings from the lovely Bulkley Valley, The dAIR lacks clarity of details; rather disappointing given the amount of public funds poured into the process to date, inclusive of the working group participation. Maybe the dAIR is meant to be somewhat ambiguous at this stage, but I was expecting more substance in exactly what studies are to take place that are needed to address potential concerns in detail. Such studies are silent in the document; it seems to be fairly open ended on what is expected of the proponent, very generic in fact. I get the impression that the document is written by the government and not the proponent since it reads what the proponent should do as opposed to what the proponent plans on doing. Perhaps others with experience in the dAIR can provide additional insight or perspective. Regarding Telkwa Caribou, there lacks specific direction with respect to proponent having to address potential effects to: (i) alteration and/or loss of habitat; (ii) change in mortality; (iii) change in movement patterns. Obviously the footprint of the mine will result in direct habitat loss (existing unlogged forests) and recovering habitat loss (young forests), plus any habitat displacement impact associated with mine activity related disturbance. Caribou preferentially select habitat for avoidance, so any disturbance impact radius should be identified and considered to become unoccupied by caribou.	The draft Application Information Requirements (AIR) does not go into specific details about how the

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IR-01-32	Len Vanderstar, Bulkley Valley, BC	(2/3) Regarding change in mortality, well that will be a useless estimate given the current low caribou population count; it may be different if the herd was fully recovered with the mortality estimate likely being statistically supported. The same applies to change in movement patterns given the fact that surviving caribou are no longer using the Goathorn Creek corridor to the Telkwa River as much as they have done in the past for a few reasons: 1) The caribou that used the Goathorn Creek corridor suffered high mortality due to landscape alterations (forestry and roads) which facilitated predator access. 2) Movement patterns, in part, are attributed to learned behaviour from mothers, and when the continuity of maternal knowledge is disrupted (think of elephants in Africa), there is no way to pass the knowledge along. In this case, the likelihood of caribou using the Goathorn Ck. corridor would be by default only. Points 1 & 2 above are illustrated by the minimal telemetry locations in the area in recent years. There is no mention of the risk of acoustic displacement due to blasting, notably the potential impact to the post calving congregation area of the Camel Humps. The proponent and government know about this concern, so why is it not reflected in the dAIR?	The draft Application Information Requirements (AIR) does not go into specific details about how the assessment will be conducted as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the dAIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The technical approach to assess effects on caribou was developed through a technical subworking group consisting of the Wet'suwet'en, federal and provincial government biologists, and the consulting professional biologists tasked with the baseline and effects analysis. In addition, the BC *Professional Governance Act* ensures that professionals in the various associations (Conformity Assessment Body [CAB], Association of Professional Engineers and Geoscientists of British Columbia [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines. The subworking group was involved in the development of the methods to be used for analyzing potential effects through each indicator, as listed in the draft AIR, using a range of existing data, including 20 years of telemetry and mortality data, and the cumulative existing and reasonably foreseeable disturbance footprints in the area.

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IR-01-32	Len Vanderstar, Bulkley Valley, BC	(3/3) Regarding “conduct a cumulative effects assessment”. Well, there is a fundamental reason why the Telkwa caribou are at risk of imminent extirpation as declared by Catherine McKenna, Federal Minister of Environment and Climate Change on May 4, 2018: habitat fragmentation from historic adjacent areas due to Kemano project dams and resulting flooding, logging, mining, rural & urban development; habitat fragmentation within the Telkwa Caribou recovery area; current habitat fragmentation within the Telkwa Caribou recovery area due to Coastal Gaslink What more cumulative impact can a herd take that is listed as threatened and in imminent threat of extirpation? How many more times will the dice be rolled before we blink these creatures off the landscape? The dAIR states, “identify measures to avoid, manage, or otherwise mitigate potential adverse effects”. As I have noted above, with the minimal existing caribou population, the proponent could easily justify that the mine will have minimal impact on the Telkwa caribou, and possibly offer some compensation money (offsets) so as to fund zoo keeper type behaviour via predator control, supplementary feeding and possibly maternal penning of these wild animals. In summary, the AIR should insist that the assessment reviews the likely impact on the success of the recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation. Len Vanderstar	
IR-01-33	Anonymous, Smithers, BC	The most recent Technical Working Group meeting notes available on EPIC (from May 6) state another working group meeting was to be held in late May. The May 6 notes also mention an "ERM Baseline Report" containing information regarding groundwater and surface water quality related to the project. Lastly, the dAIR mentions a "VC Selection and Rationale Document" submitted to the EAO by Telkwa Coal Ltd. None of these meeting notes or documents are currently available to the public, yet they all contain valuable information for anyone wishing to make an informed comment on the proposed project. Please make all available meeting notes and documents related to the Tenas Project available on EPIC immediately. Thank you.	All documents referred to in this comment have been uploaded to the Environmental Assessment Office (EAO) ePIC website.

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IR-01-34	Dan Pearlman, Telkwa, BC	This proposed project would have many negative impacts even if all goes according to plan. This project has many negative aspects even if all goes according to plan. The potential threats are even worse. My concerns are as follows in order of importance. 1. Water quality- The plan to flood the nag rock holding area with 6’ of water forever is not realistic The potential to disrupt a heathy salmon bearing river is to great. 2. Air quality- Dust and overall emissions created by mining and transport of coal make no Sense environmentally. Canada including BC needs to stick to their environmental commitments. 3. Local considerations- the close proximity of the site to blue listed caribou will most likely have a Negative long term impact. The noise and dust will have an adverse impact on the health of those Nearby. Real estate values have and will continue to go down when close to coal mines	The topics noted will be addressed in the water, atmospheric, human health, socio-economic and wildlife chapters of TCL's Environmental Assessment (EA) Application. Water quality and quantity (Sections 4.3 and 4.4) and physical interactions with fish habitat (Section 4.6) are key elements of the aquatic effects assessment that will be conducted in support of TCL's EA Application. Dust emitting sources will be evaluated, and potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed and mitigation measures applied, if necessary. (See Section 4.1). Federal and provincial caribou biologists are involved in the Environmental Assessment Office (EAO) Working Group. Housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (Section 6.5).
IR-01-35-a	Linda Curphey, Telkwa, BC	To all those who share a deep concern about the health of our planet and all of its inhabitants including us| 1. We as Canadians pay for an Environmental Ministry and expect this group of people to have the interest and determination to protect the land, water, air and the wildlife that we depend on for our survival.	We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project.
IR-01-35-b	Linda Curphey, Telkwa, BC	2. Most of us know now that studies that have proven over and over again that there are catastrophic effects of climate change including the warming of the earth due to human input of carbon into the atmosphere. The planet needs mankind to join hands and together have the will to protect and "save" ourselves from destruction. Many experts now feel that it may already be too late with that tipping point, especially if we continue to make compromises about the environment. 3. No more room for compromises. Now is the time to "Think Globally, Act Locally" - a phrase coined probably 20 years ago now regarding Environmental Stewardship.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

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IR-01-35-c	Linda Curphey, Telkwa, BC	4. From what I have read and heard at a village public meeting regarding this coal mine- Tenas Coal is that: a. The water will be tampered with. Groundwater used for wells, water coming directly from a mountain top, clean, pure will be used in huge amounts and then put back into the water system altered. Human beings, and wildlife depend on this water for drinking and for its fish to eat. Drinking water is a lifeline for all. How can we even consider altering the quality of water in any way. The Telkwa river flows into the Bulkley river, which continues on toward the ocean. Many people depend of these waters and have relied on these systems for food and water for years. b. Water levels have been extremely low in the past years due to droughts. The health of the fish population has been in jeopardy already. Droughts are predicted in the future. Any research on droughts/climate change and the rivers in the north right now shows that this is the pattern and a growing concern. The Tenas mine requires huge amounts of water to extract its coal.	Effects of water withdrawals and discharge required for the mining process will be accounted for in detailed water quality and quantity modeling (section 4.3). These models account for climate change and include a range of extreme wet and dry conditions in order to test system performance under extreme conditions. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

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IR-01-35-d	Linda Curphey, Telkwa, BC	5. I have been living on Coalmine Rd. for 5 years now. The traffic has increased on this road so much that several of my neighbours are building sound barrier/ child safety fences along the properties for protection. The noise is so bad that our homes shake and one feels the vibration of the loud, huge trucks when they speed by. People speed all the time on this road as well. The speed limit is 50 km. If someone is hit at this speed, it most likely will be fatal. There is already a gravel pit company on Skillhorn Rd. Big trucks travel back and forth all day long. There is a Fire Attack base on Skillhorn Rd. as well, also needing Coalmine Rd. as an access route during fire season. All this traffic causes immense amounts of stress and also tons of exhaust fumes which linger in the air for hours. The bridge that is used to get to Coalmine Rd. is narrow, one lane; people have to take turns crossing it. Some big trucks have already damaged the bridge which required expensive repairs this year. Increased traffic in this area will be dangerous. Many children live in this community and are on the road playing and riding their bicycles. Yes I have heard that a special road is planned for Lawson Rd. to deal with the coal transportation however that road needs to be built and during that time, Coalmine Rd. will be the main entry way to the job site and I am sure employees will use it in the future as well. Not a solution to this problem.	Project-related noise, traffic and access-related activities to Coalmine and Skillhorn roads will be considered as part of assessment of several components including the Atmospheric component. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only, even for pathway components. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Assessment of the Atmospheric VC will present the subcomponents, key indicators and pathways along which potential effects could occur. These subcomponents include assessment of air quality, greenhouse gases (GHG) emissions and noise during each phase of the Project. Indicators for the noise subcomponent include changes in noise levels (e.g. daytime; nighttime; low frequency). In section 6.3, transportation is identified as a subcomponent of the Infrastructure and Services VC. The indicator for this subcomponent is a change in the level of service (road, rail, traffic patterns and infrastructure). In section 6.3.2, a traffic count report is required. In section 6.4, Lands and Resource Use, a change in access to land use areas is an indicator for the three selected subcomponents (commercial land use; public recreation and current use of land and resources for traditional purposes). Assessment of the Infrastructure and Services and Land and Resource Use VCs also contribute to the assessment of the Community Well-Being VC, including, again, consideration of a traffic count report. Mitigation of the potential effects, such as proposed construction of a Bypass Road, will also be included in TCL's EA Application.
IR-01-35-e	Linda Curphey, Telkwa, BC	6. The area where the mine would be is a Caribou wildlife protection area. . Caribou are an endangered species.	Caribou is a subcomponent of our wildlife valued component (Section 4.8 of the draft Application Information Requirements) and inquiries will be addressed in the wildlife chapter of TCL's Environmental Assessment (EA) Application.

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IR-01-35-f	Linda Curphey, Telkwa, BC	7. No need to make Steelmaking Coal. An article written in , "Wildsight", "Do we really need Steelmaking Coal" 8 If we look at the mistakes and the result of the coalmines in the Elk Valley with deformed fish and more, we should heed the warning and not take any chances with any so -called new and improved technology . Life experience has always shown that tampering with nature in any way is a mistake and could be argued as morally wrong in these times especially when we know the importance/necessity of clean water, air, ground for our mere existence.9. As Canadians, we have an opportunity to join other nations who are now leaders in the environmental movement with real change, real, honest efforts to have progressive, strict policies. Investors can put their money towards new energies, new steelmaking methods. The time is now to support the new, healthier ideas, and stop supporting any company that wants to exploit our clean water, land, harm the fish, disturb the wildlife, harm ourselves any further, in any way. We are at the breaking point now on this planet and it may be too late if these projects continue to find their way into our economic system. Yours Truly, Linda Curphey	As noted, the coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Currently, there is no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). During the life of the Project, we expect there will be a demand for metallurgical coal. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application.
IR-01-36	Allen Szafer, Sooke BC	It is astounding to me, personally, that our government would even consider such an egregious desecration of our environment. It flies, if you'll pardon the analogy, like coal dust in the faces of your constituents. I suppose it is standard practice, or at least is seems so--to avow one stance and then lift the other leg. Too bad.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-37	John H. McDivitt, Telkwa, BC	This mine should be good for the town of Telkwa and the people that live here. (TAXES)	Thank you for your comment. We appreciate your support of the Tenas Project.
IR-01-38	Anonymous, Vancouver, BC	Allegiance Coal’s plan to build more dirty energy infrastructure, at a time when BC is effectively moving toward clean energy, is risky and out of step with the goals of the province. Acid rock drainage and metal contaminants are common to coal mines, and can have devastating impacts. In this case, a mine near the Telkwa would create major environmental and economic impacts on the Telkwa’s salmon and steelhead runs, wildlife, and the drinking water and recreational life of nearby towns. Please say no to this dangerous, short-sighted, and unwanted mine.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

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IR-01-39	Anonymous, Port Saint Lucie	Coal is obsolete and its use is damaging to the environment. Invest in clean sources of energy	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-40	Dr. R. Chadha, Vancouver, BC	It is disappointing to see that, despite the mission of "CleanBC", we are continuing to be inundated with new projects that double-down on environmentally destructive infrastructure and/or greenhouse gas emission (GHG) acceleration. Many international jurisdictions are transitioning away from coal (Germany most recently announced), one of the most GHG production-intensive substances. Here in BC we're going exactly the other way. Investors are increasingly aware of the harm that comes from coal and are actively investing in green technologies. We should be doing the same here in BC with development of green infrastructure. This is a win-win for workers, the community, and the environment. Coal mining must stop for the sake of future generations.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR section 4.1, greenhouse gases (GHGs) will be addressed in TCL's EA Application. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-41	Jeff Muckle, Halfmoon Bay, BC	There is no need for coal extraction in 2020. Utility Companies are moving to Wind & Solar for electricity production and even bypassing LNG. If this goes ahead they must have bonds in place for total clean-up. We already have too much mining liabilities already in BC. You proved your inability to clean up or charge anyone for the mount Polley spill. The worst mining disaster in Canadian history. Thank you for taking comments.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

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IR-01-42	Diandra Oliver, Telkwa, BC	There's so many disappointing and discouraging things about this project, but one the major ones is that Allegiance wants this project because it costs SO LITTLE to run they're GONNA MAKE A HUGE PROFIT. Resource Projects and Corporations need to PAY to take resources and water out of the land IF and BECAUSE they will leave WASTE out here in our neighbourhood. OW should not be the only stakeholders at the table pushing back at Allegiance. Mr Malcom Carson, Non Executive Chairman, commented: “It truly is a remarkable achievement that a bulk commodity mining operation can be so low down the cost curve without the benefit of scale and volume to drive unit costs down. It is rare for key cost drivers such as simple geology, exceptionally low strip ratio, good yield and excellent logistics to align in this way and deliver a coal project that can generate strong returns without scale and without the burden of major upfront capital. Allegiance is very fortunate the Telkwa Metallurgical Coal Project is proving to be one such project”.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. We have always strived to exceed public consultation requirements. As an example, we have already held three more open houses than what is required. Through that early public engagement, we have made material changes to our project in direct response to the local community, such as building a Bypass Road. We will continue to strive to exceed the public consultation requirements in addition to following the process that the Office of the Wet’suwet’en have set out for us.
IR-01-43	Kathleen Code, Cobble Hill	Really? A new coal mine in the midst of the greatest climate crisis of our times? Not a whisper of GHGs to be emitted over the lifetime of the mine. British Columbians will have to deal with contamination and GHGs in perpetuity while profits flow offshore. There's so much wrong with this proposal, beginning with the company's decision to go with the older environmental process, which holds them to a lesser standard, signalling a lack of interest in upholding the best environmental standards. A coal mine in the middle of caribou recovery lands, in the midst of pristine water and environment for the sake of a few jobs? There are more and better jobs to be found in the renewable energy sector, in wilderness and recreation, in ecotourism and environmentally friendly careers. There are no upsides to allowing a junior company with no other revenues to mine in this wonderful community. No professional reliance standards, no community consultation. The list goes on. I would hope the government turns this down.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application including a greenhouse gas (GHG) assessment in section 4.1. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). It is inaccurate to state that there has been no community consultation. We have always strived to exceed public consultation requirements and will continue to do so. Three in-person open houses have been already held in 2018 and 2019 (prior to the two virtual sessions in 2020), as well as hundreds of meetings with neighbours and other community stakeholders. As a result of direct feedback from the local community, we have made material changes to our project. TCL's EA Application will include the EA presented by the technical discipline experts, members of their respective accredited professional associations. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

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IR-01-44	Dianne Varga, Nanaimo, BC	(1/2) I oppose the proposed open-pit coal mine near Smithers for myriad reasons. First, the mine would be located only seven kilometers from the town of Telkwa, and local group What Matters in Our Valley says that's way too close. Residents are concerned about water quality as well as dust and noise from blasting, trucks and machinery. It's oh-so-reminiscent of the open-pit Ajax mine that was once proposed for the outskirts of Kamloops. Why is somebody else's backyard the best that mining companies can think up? The proposed project also overlaps with the Telkwa caribou herd recovery area, a 1,300-square-kilometre region designed to monitor and protect the endangered herd. At the last count in October, there were just 32 caribou. Retired ecosystems biologist Len Vanderstar was involved in setting up the protected area and recovery plan in the 1990s. He's concerned that constructing a coal mine so close to vital habitat could reverse the successes in protecting the herd.	Your perspective is noted. As described in draft Application Information Requirements (AIR) sections 4.0 to 14.0, topics raised will be addressed in TCL's Environmental Assessment (EA) Application. The purpose of the draft AIR is to identify the information that is to be included in TCL's EA Application. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. As noted, the coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Currently, there is no commercially available method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). During the life of the Project, we expect there will be a demand for metallurgical coal. The end land use goal, reflecting current and past land uses, is multiple-use forest ecosystems including wildlife habitat, recreation, the potential for forest harvest in appropriate areas, and traditional land uses.
IR-01-44	Dianne Varga, Nanaimo, BC	(2/2) "What more cumulative impact can a herd take that is listed as threatened and in imminent threat of extirpation?" he asks. "How many more times will the dice be rolled before we blink these creatures off the landscape?" The mine would also be just a few kilometres from an important salmon watershed, which provides an important source of food for the Wet'suwet'en, whose unceded territory the town sits on. Finally, there are ways to manufacture steel that do not involve metallurgical coal and that produce lower emissions. Instead of approving this mine, Canada ought to invest in R&D surrounding the development of hydrogen technologies to create zero-emissions steel production. Zero emissions! This is 2020, not 1950. It's shocking to me that the government finds it necessary to even have a consultation on an open-pit coal mine. Come on. The province can and must do better than this.	

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IR-01-45	Anonymous, Vancouver, BC	This project proposes to create 150 jobs during construction and employ 170 workers at peak operations, for at max 25 years. Yet these jobs create significant risks to water and wildlife and the Wet'suwet'en First Nations territory. Not a great start when the BC Government recently signed a historical agreement with the Nation recognizing their inherent rights and title... Acid-generating rock would need to be monitored in perpetuity and the project overlaps with the Telkwa caribou herd recovery area that monitors and protects the endangered caribou. At the last count there were just 32 caribou... The mine is also in close proximity to post-calving grounds, such as the Camel Humps. Why is BC still considering coal in 2020? It is time to deny this application and transition to renewable and clean energy. More jobs in perpetuity - safer communities for animals and people. Let's get on with the transition.	As described by the draft Application Information Requirements (AIR) sections 4.4 (groundwater), 4.3 (surface water), 4.8 (wildlife), and 13.0 (management plans, including a Metal Leaching/Acid Rock Drainage Management Plan) will be addressed in TCL's Environmental Assessment (EA) Application. Federal and provincial caribou biologists are participating in the Environmental Assessment Office (EAO) Working Group. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting our studies. We are committed to continuing the process that the Office of the Wet'suwet'en has set out for us.
IR-01-46	Anonymous, Nelson, BC	As a nurse, I am incredibly worried about the heath impacts to humans, water, and wildlife , that are associated with this project, and I am firmly against it. It is unacceptable that this project go forward without any consideration for its impacts on water quality. The devastating impacts it will have on caribou herds in the region, the risk for fish collpase, as well as the fact that black lung disease is still widespread among coal miners, make this mine a significant health hazard to all beings. To put an end to environmental racism in the province, our government must ensure that clean jobs are available across all communities, and coal mining is not one of them.	As described by the draft Application Information Requirements (AIR) sections 4.4 (groundwater), 4.3 (surface water), 4.8 (wildlife), and 13.0 (management plans, including a Metal Leaching/Acid Rock Drainage Management Plan) will be addressed in TCL's Environmental Assessment (EA) Application. Federal and provincial caribou biologists are participating in the Environmental Assessment Office (EAO) Working Group. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting our studies. We are committed to continuing the process that the Office of the Wet'suwet'en has set out for us.
IR-01-47	Anonymous, Burnaby, BC	I understand this is a good economic project but I'm really uncomfortable with it from environmental and health perspectives. To me the harms outweigh the good.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . We encourage you to review the conclusions of our Environmental Assessment Application once submitted.

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IR-01-48	Bryan Swansburg, Smithers, BC	My understanding is that the Canadian Federal Government, BC Provincial government have made promises to decrease carbon pollution while the IPCC and all Climate Scientists require the world to have net-zero carbon emissions by 2030 ± 20 years if we have any chance of sustaining human civilization. How is this project - producing 800,000 tons of coal = 2.3 million tons of carbon dioxide annually - going to reduce the amount of carbon dioxide in the earth's atmosphere?	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the Application. A GHG assessment will be included in TCL's Environmental Assessment (EA) Application as described in draft AIR section 4.1. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-49	Anonymous, Cranbrook, BC	Rapid Climate Change is upon us and threatening our very existence. We must respond quickly in order to save humanity. Coal must cease to be extracted and burned. We must restore our planet's green spaces, not add more catastrophic chemicals and pollutants to the environment. At this time, it is incredulous that a project such as this is even being considered.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-50	Graeme Pole, Kispiox Valley, BC	How does an industrial project of this magnitude, on the doorstep of a wildlife recovery area for an isolated herd of a threatened species, mesh with the objectives of that recovery area? How serious are we as a society about taking every necessary step to ensure that the Telkwa caribou herd survives? We cannot consider ourselves serious if we profess caribou recovery with one hand while entertaining this project with the other. There is a provincial law (Climate Change Accountability Act), that should stop applications such as this one from Tenas Coal at the door if BC is to have any chance of making its GHG reduction targets. No matter that most of the coal that would be mined would likely be burned offshore; we all breathe the same air. The Draft Application Information Requirements (AIR) for the project are typically cookie-cutter. The project is chunked into so many tiny parts, the proponent (and the BCEAO) can dismiss each impact as "insignificant." There will be no true appraisal of cumulative effects in local, regional, and national contexts. The transition from an AIR to fieldwork is always problematic. Once cut loose on the landscape, proponents always shortcut the process in order to save money and get work done. Look at Coastal GasLink. Look at any open-pit mine, anywhere in the world.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). As described by the draft Application Information Requirements (AIR) sections 4.8 (wildlife) and 4.1 (atmospheric), including cumulative effects, will be addressed in corresponding chapters of TCL's Environmental Assessment (EA) Application. The science is presented by accredited professional biologists. The BC *Professional Governance Act* ensures that professionals in the associations (College of Applied Biology [CAB], Association of Professional Engineers and Geoscientists of BC [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines. Federal and provincial caribou biologists form part of the Environmental Assessment Office (EAO) Working Group. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

Tenas Coal draft			
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IR-01-51	Anonymous, Vancouver, BC	Coal is simply not the future for BC. This is a 100% foreign owned company that is not concerned about the future and best interests of BC and Canada. The number of jobs created by this proposed project do not outweigh the costs to the environment. Their are known health impacts for those working in coal mines and the cost of treating those health conditions will not be paid by the foreign the company - this costs BC taxpayers. There are alternatives to using coal for steel production that are much cleaner than coal. We need to focus on the land, water, air quality for our future - there really is no other option. This project should not be approved.	As described in the draft Application Information Requirements (AIR) sections 4.0 to 14.0, topics raised will be addressed in TCL's Environmental Assessment (EA) Application. The purpose of the draft AIR is to identify the information that is to be included in TCL's EA Application. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-52	Bob Mitchell, Smithers, BC	Due to Global Warming coal mining should be phased out everywhere never mind starting a 'new' coal mine near Telkwa B.C. We don't need more CO2 in the atmosphere. Should we 'risk' our home planet never mind the water, wildlife and fish to support the production of steel? A shortage of metallurgical coal should not be used to support a CO2 emissions that are overwhelming our planets ability to cope. We cannot outsource our Bulkley Valley responsibility to protect the planet to Japan or China. If this project is approved we will 'own' that responsibility.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-53	Anonymous, Prince George, BC	As an economic booster this project is like turning back in time. The way of the future is not in coal. The long term impacts to our environment make this project unacceptable. The fact is it trades our sacred land to foreign investors and it lacks long term transition to a healthy vision for all, not just a few. I believe we have the intelligence and opportunity to do better at creating jobs that sustain all life (land, water and people).	As described in the draft Application Information Requirements (AIR) sections 4.0 to 14.0, topics raised will be addressed in TCL's Environmental Assessment (EA) Application. The purpose of the draft AIR is to identify the information that is to be included in TCL's EA Application. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).

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IR-01-54	Anonymous, Telkwa, BC	Why are Surface Water and Groundwater not included as a Valued Component but listed as an Intermediate Component. The quantity of water that Telkwa Coal proposes to use is huge. Surface and groundwater cannot be judged by historical values with the climate change we are now facing. One year the river is low, one year it is high. We have drought years and years with lots of precipitation. Both Surface and groundwater should be a VC and require intensive studies.How climate change can be predicted should already raise the question of how a coal mine can be considered at all.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate (pathway) Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using VCs only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.
IR-01-55	Thomas Roper, Telkwa, BC	telkwa coal has not discussed the flotation process and i would like to know what chemicals will be used in the separation of the coal from the dirt. how will these chemicals be captured and if they are within the water that is to be treated, how will the treatment process work and how can telkwa coal guarantee there will be no adverse effects on salmon and local drinking water.	The chemicals used in the flotation process are diesel fuel and Methyl isobutyl carbinol (MIBC) which bind to the coal to improve its flotation ability and stays with the coal as it is transported to the customer.
IR-01-56	Thomas Roper, Telkwa, BC	during the blasting process, fertilizer and diesel fuel are used. these products actually cause a certain level of contamination. in a hard rock mine they are removed from the concentrate product and pumped in a slurry to the tailings pond for forever storage. what will be telkwa coal's process be and how will they prevent this pollution from entering the watershed?	Only ~65% of the material mined at the Project require explosives and the Project uses a powder factor 30 to 50% lower than a typical hard rock mine, both of which reduce the amount of explosives used. The key issue with explosives is the potential for incomplete detonation and spills (source of nitrate). We will use leading management practices to minimize these issues. As per the draft Application Information Requirements (AIR) section 13.0, we will have an Explosives Management Plan.
IR-01-57	Anonymous, Upper Musquodoboit, Nova Scotia	For a country that espouses the end of fossil fuel use in Canada I am shocked to hear my government is considering approving expansions of coal mines, oil exploration and pipelines. Humans have done far too much damage to this planet already. The science is there that says we must change our ways if we have any hope of surviving as a species. Stop exploiting nature for short-term financial gains. Invest in renewable energy, social justice and environmental stewardship jobs that will improve our environment and produce a long-term, sustainable economy.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).

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IR-01-58	Dave Evans - Upper Skeena Angling Guides Association, Telkwa, BC	(1/2)This area is a world class Steelhead fishery. Along with the local anglers that fish for Steelhead in this region, people have come from all over the world for many decades to fish here. This fishery has provided a stable and viable tourism industry for a very long time. Along with Steelhead, the rivers of the Skeena region are home to 5 species of Salmon (Chinook, Chum, Coho, Pink, and Sockeye), Rainbow trout, Dolly Varden, and Bull Trout. This region is one of the last wild and intact Steelhead fisheries that remains in the world. We feel this proposed Coal mine threatens the fish species and aquatic habitat of this region which in turn could have potentially devastating consequences to these species, the sport fishing industry, the long-term sustainable tourism sector in our communities, the opportunity to local anglers, and the Food, Social, and Ceremonial fishing rights of the First Nations of this area. Concerns: • We have major concerns regarding the water requirements for this mine. As this region has been experiencing more drought conditions the Forest, Lands, Natural Resource Operations and Rural Development pursue a Drought Management Plan for this region. This plan would allow the fisheries to be closed once the river temperatures reach a certain temperature and low water conditions to protect Bull Trout. The backup plan for more water if required is from Goathorn Creek. Goathorn Creek is a cold water input for the Telkwa River which is a cold water input for the Bulkley River. How does the mine have permission to use water from a valuable cold water input so important to the fish habitat?	We agree that steelhead and salmon species form a critical part of the fabric that binds and support the community in the Bulkley Valley; and that healthy and stable water quality and quantity are fundamental to healthy aquatic ecosystems. The project team would be interested in hearing more regarding the angling on the Bulkley River adjacent to the rail infrastructure. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's (EA) Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working

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IR-01-58	Dave Evans - Upper Skeena Angling Guides Association, Telkwa, BC	(2/2) All water from the site will ultimately flow into creeks flowing into the Telkwa River and then into the Bulkley River. Bituminous coal is a dirty coal product. The company stated the water demand for washing the bituminous coal is about 66 litres per ton of product. This equates to 50 million litres of water they suggest they intend to get from rainfall and groundwater wells. How do you recycle this water for reuse and/or dispose of the waste? • Processed rock/Acid Rock Drainage now to be submerged under water and retaining ponds. What are the life spans of this type of infrastructure? Who will continue to monitor and pay for them after 100 years and more? • The load out site is adjacent to the Bulkley River which is a world class Steelhead fishery. We are not in favor of the load site as it is along a very popular stretch of the river for fishing. What will be the effects on the aquatic habitat from the chemicals used to reduce dust, and effects of sediments or transport of deleterious materials into adjacent waters? Will it visually impact this area? Will there be an increase in constant noise to this area? • Blasting impacts on wildlife values in and around the project area. • Selenium is often a byproduct of coal mining • Fugitive methane is also an issue. How this will be dealt with, or any greenhouse gases originating from the site? The Uppers Skeena Angling Guides Association is absolutely opposed to this proposed mine.	with the Wet'suwet'en, the public servants in the multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. Water requirements are relatively low for our Project compared to other proposed mining projects because the water management system includes substantial water recycling within the facility. Rainfall and runoff within the mining footprint is utilized for the process plant and stored to maintain sufficient water cover in the management ponds. Water in excess of project demand is discharged after allowing for the sediment to settle. Effects to streams as a result of these discharges are quantified in the water quality and quantity modeling. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-59	Thomas Roper, Telkwa, BC	telkwa coal and the eao have not stated that WATER is a valued component. it has been designated as an intermediate component. they have stated that fish are a valued component. that fish habitat is a valued component. but the actual usage and contamination of water is not being seen as a valued component. telkwa coal has stated that they will need to consume 15,000 liters per hour ,360,000 liters per 24 hour day. annual consumption at 131, 400,000 liters. that is a considerable amount of water consumption. this can and will affect the watershed especially during low water years. with climate change, any scenario can develop, from too much water, to not enough water. water is the biggest concern with telkwa coal's operation and must be a valued component. will telkwa coal and the eao review this question and redesignate water as a valued component?	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.

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IR-01-60	Anonymous, Newbury Park	Building another coal mine in an era where we are advancing towards clean and renewable energy is nonsensical. The amount damage it will bring to the Telkwa River ecosystem would be irreversible. For the sake of the wildlife and the future generations of people who wish to use it as a sustainable resource, please do not build this mine.	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-61	Anonymous, Telkwa, BC	I would like to know what protection there will be for the river and what mitigation will be provided against flooding at the rail loop/loading area.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, the terrain assessment will be in section 4.2 while the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles and section 3.5 will outline mitigations, as required.

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IR-01-62	Anonymous, Telkwa, BC	(1/2) I live in a little subdivision approx. 5 km from the proposed mine site. I have nine neighboring families. The proposed hauling road will be approx. 1 km away where it will twin the power line. Our water resource (well) is from the Goathorn Creek. I saw in the dAIR that groundwater and surface water are not included in the Valued Components. I am very concerned about this as this should require intensive testing to ensure that our water remains pure and clean, and that the level of the ground water doesn't go further down as it already is. Surface and groundwater should be included as a VC. Air quality and noise are also only included as intermediate components. How can this be, air quality, dust and noise are also very important to us and the environment. The coal trucks and cars that will be on the proposed hauling road will create a lot of dust and noise 24/7 for the next 25 years. Land and resource is mentioned under the VC for public recreation. Where will the boundaries be? How can I be assured that I will still be able to access my hiking and riding trails or access Hunter's Basin. So far I have only gotten verbal assurances from the company. If the mine were to go through, what would stop them from denying access, stating safety and insurance reasons. I'm also concerned about the wildlife, especially the caribou as they are already under the Species at Risk Act. A mitigation involving culling wolves to save the caribou is not the answer either.	The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in the Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's Environmental Assessment (EA) Application. We are following the EA process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements, we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Similarly, air quality or noise is part of the effects pathway for biological receptors such as humans. Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities.

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IR-01-62	Anonymous, Telkwa, BC	(2/2) Telkwa Coal proposes to dispose of water from the minesite into the Telkwa River, by way of pipeline. This could potentially destroy our water, watersheds, salmon and all other aquatic creatures, all the way to the ocean. The proposed tailing pond would be around the size of Tyhee Lake. What would happen if the dam breaks like it did at Mount Polley. Over $75 million has already been spent for remediation there. How will Telkwa Coal, as a junior company with no money, have the finances to put up a bond large enough to mitigate damage? How will Telkwa Coal have enough money to ensure that the dam will be safe in perpetuity? How can they predict climate change and weather. Massive rainfalls or huge snowpacks could endanger the dam. I also don't understand how Telkwa Coal can be assessed under the provincial EA when they continuously state for the shareholders, that they will increase production at this mine site after 5 years, to 1.35 tpa.	Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed. Noise modelling will be conducted to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. On caribou, wildlife management measures such as culling wolves is not within the scope of authority of TCL. TCL's EA Application will identify measures to avoid, manage or otherwise mitigate potential adverse effects following the hierarchical procedure of avoid, minimize, restore, and offset, among other best practices. This will be focused on habitat, sensory disturbance risk of mortality, and movement patterns. A public access plan will be presented in the EA Application subject to government requirements. Bonding is part of the permitting process. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75 to 0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future expansion plans would require an additional regulatory process.
IR-01-63	Anonymous, Port Edward	A coal mine within the Skeena River watershed is as bad as, if not worse, than a LNG facility on Lelu Island. It's temporary benefit to the economy will also come with detrimental and irreversible effects on the river's already fragile ecosystem. Let's not and say we made the right choice! No to the Telkwa mine project!	Your perspective is noted. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application.

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IR-01-64	Caroline Farquhar, Hornby Island, B.C. V0R 1Z0	(1/2) I am deeply concerned about a proposal for such an environmentally destructive and climate costly fossil fuel extraction project in the 21st century. At a time when all nations, all peoples and all corporations should be focusing all our intelligence, creativity, finances and efforts towards freeing humanity and the planet from fossil fuel dependence - this project proposes the 20th century status quo: for the next quarter of a century.... The citizens of British Columbia - and the ecology of British Columbia - deserve better than that. The Wet'suwet'en people are already fighting for their lands and lives in regards to the oil pipeline currently being built without their unified permission. This coal extraction proposal threatens Cariboo restoration territory, Salmon spawning sites, as well as river & forest health within Wet'suwet'en territories: the investments required to ensure the ecological safety of just a few of these areas (whilst others were obliterated by the mine site itself) would make the entire project financially impractical.	The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in the TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The Tenas Project is undergoing a full regulatory review through the BC E*nvironment Assessment Act,* the BC *Mines Act* and the BC *Environmental Management Act* . We are following the environmental assessment process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local government, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. We are committed to following the process that the Office of the Wet'suwet'en have set out for us.
IR-01-64	Caroline Farquhar, Hornby Island, B.C. V0R 1Z0	(2/2) The project is completely impossible and incompatible with species preservation commitments already made by the provincial government. Given the statistical odds of toxic leaching, spilling, or transportation accidents the township is almost guaranteed to suffer ground water quality issues or some other form of health challenge over the 25yrs the mine proposes to be active. The ecological wealth of northern B.C. offers the citizens of British Columbia far greater security, diversity in employment, and diversity in sustenance than a coal mine will ever be able to match. I strongly encourage Telkwa mines to change gears and translate their operations to focus on abandoned mine clean-up: an industry in high global demand , with far better alignment in 21st century "cyclical economy" norms, and the potential to make profit from renewing the planet rather than its destruction.	

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IR-01-65	John Stevens, 4515 River Road West, Delta, BC	This mine should never be allowed as it flies in the face of our efforts to combat climate change. As a long time commercial fisherman I see this mine as a threat to valuable Skeena river salmon populations. BC salmon stocks are already under threat from salmon farms, clear cut logging and mines such as Mt. Polley. The mine is also a threat to the health of local caribou populations. BC needs a new green economy that is clean and sustainable.	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's Environmental Assessment, including fish and fish habitat in section 4.6, and wildlife in section 4.8. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . There are also numerous other pieces of legislation, regulation, policies and technical guidance documents and a dozen more permits or licenses required prior to operations. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-66	H. Podrow, Burnaby BC	To add another reason among the many stated already for the abandonment of this HORRIFIC PROJECT, coal is now being considered 'OLD TECHNOLOGY'. Something certainly doesn't make sense here???????	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).

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IR-01-67	Cathy Fortin, Prince George, BC	I cannot believe, in this day and age, that there is a proposal to start a new coal mine. We are being asked to allow a valuable, beautiful area to be destroyed for the benefit of some foreign entity who has no idea of what is being lost nor does it care. How in the world was the water not considered a Valuable component? Water is life! This mine cannot go forward, for so many reasons and I urge you to stop it now.	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using VCs only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada.
IR-01-68	Anonymous, Pueblo, Colorado	why are we considering a coal mine? Coal mines are practically a thing of the past We should be concentrating our money and time on sustainable energy projects which are less harmful to the earth and all of its inhabitants	The coal at the Tenas deposit is for steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-69	Nancy Wigen, Salt Spring Island BC., V8K1C3	Climate Change is the most serious issue for our time, and the affect of fossil fuels on the dangerous increase in Greenhouse Gasses and Global Warming is well known. I thought coal mining had been stopped in Canada. It should be. The other serious concern is the effect such a mine could have on our Wild Pacific Salmon in the spawning streams of the Skeena, which is a most important Salmon river. Clean water and undamaged habitat are essential for salmon reproduction and survival. Any threat to our wild salmon should certainly be avoided. We need the healthy food that salmon have supplied this coast for millennia. Not just humans but the whole coastal ecosystem, birds, animals, orcas, bears, other fish, marine mammals, even the forests depend on our wild salmon and the nourishment they bring from the wider ocean. Salmon are a National Treasure.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plans chapters of TCL's EA Application (see draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).

Tenas Coal draft			
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IR-01-70	Annie Rivest , Terrace, BC	Im in total opposition to that projects...Its à no brainer to push toward a really dirty project like coal when we see the degradation of the environment that's happening faster and faster and that we need to move toward green initiatives and create jobs that don't destroy our planet...This area of bc is a really unik and precious water system that need to protect for all the.creatures that live within in including us,humans .Water is the source of life we can't compromise that becaus without it we're dead and the fish too	Your perspective is noted. The coal at the Tenas deposit is for steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We agree that water is important. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-71	George Lebiadowski, Telkwa, BC	The hydrology of the area between the two creeks includes porous and permeable formations. A toxic lake is expected to leach into these porous formations and access either or both of the creeks. The hydrology modelling by ERM includes scenarios where containment osesf the toxic effluent is lost and the creeks become contaminated. Two wells have been drilled and completed in the proposed Tenas area, use these wells now to perform injectivity tests and to assess transient time for contaminant front to reach these creeks. In addition, use a minipermeameter to measure permeability at porous/permeable out crops at both creeks. The permeability data along with the injection tests should help to reduce the solution space from the hydrology study and better appreciate likelihood of containment loss and magnitude of same.	Extensive field-based hydraulic aquifer testing has been completed during site investigations to characterize aquifer permeability and the groundwater system more generally; technical documentation of hydraulic aquifer testing will be contained within the Groundwater Baseline appendix of TCL's Environmental Assessment (EA) Application. Hydraulic testing to estimate permeability of the overburden and bedrock subsurface has included pumping tests, 'slug' tests, and packer isolated injection tests. Permeability data gathered will be used as input to computer groundwater models (section 4.4) to assess the effects to groundwater.

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IR-01-72	Rebecca Martin, Calgary, Alberta	Without bias, I would like to take the opportunity to state my opposition to the proposed coal mine. Firstly, giving a foreign entity the opportunity to essentially ignore the stakeholders in the very community it will impact is decidedly biased. Locals should have been given an opportunity to protest this environmental boondoggle. Secondly, the negative impacts of coal mining are known, not a potential . To poison the air and water to provide profit to a foreign entity or really anyone is unconscionable . Thirdly, as a Canadian I'm tired of paying for the cleanup of fossil fuels. And finally, my family and I visit that area every year. What has attracted us is the pristine nature and diversity of wildlife. We spend our hard earned $ locally to support that environment . We , and many others, won't continue to do so should a major polluter move to town. 25yrs of pollution that we Canadians will likely have to cleanup vs. tourism $ into the future ...clearly the wrong industry is getting the nod here. My thoughts are with the locals.	Your perspective is noted. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. Bonding is part of the permitting process and mines cannot be constructed without posting a financial bond. We have been engaging with the local community for over four years including three in-person open houses, several neighbours meetings and hundreds of one-on-one meetings. We have made material changes to our project as a result of feedback from the local community. TCL's Environmental Assessment (EA) Application will comprise the assessments of the accredited professional biologists, engineers, geologists and archaeologists on the project team. The BC *Professional Governance Act* ensures that professionals in the various associations (College of Applied Biology [CAB], Association of Professional Engineers and Geoscientists BC [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines.
IR-01-73	George Lebiadowski, Telkwa, BC	It is strongly recommended that a tracer with detection in the parts per billion be used in the toxic lakes that TENAS is proposing to build to blanket the acid rock and toxins from disturbed overburden. If the lake were to be built 1 to 2 years before it becomes filled with overburden and laced with a benign tracer it would help establish the rate and pathways the leaks. This could determine whether or not the area can be used for containment of acid rock and toxins. Leaks of the containment lake should not be discovered during operations as solutions by that time will be too late. Tracers such as mentioned here are easily available and unique enough to immediately pinpoint the source of a breach. These tracers are actively used in similar projects to ensure containment and to protect operating companies from false legal action.	The management and control ponds will be designed using a conservative approach; specifically, water seepage loss will be minimized using engineered liner systems so that water cover is appropriately maintained. Water quantity and quality modelling will help to inform the assessment of potential effects to both ecological and human receptors. As per the draft Application Information Requirements (AIR), inquiries will be addressed in sections 1.1, 4.0 (4.3 and 4.4) and 8.0. The Discharge Management Plan (section 13.0) will outline programs for monitoring water quality in the groundwater and creeks downstream of the ponds. Studies to date confirm the engineered designs will provide the necessary containment such that tracers will not be required. Not withstanding this, the Potentially Acid Generating (PAG) rock will be placed into the facility prior to adding the water cover.

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IR-01-74	George Lebiadowski, Telkwa, BC	A man made lake is being proposed to be built above the town of Telkwa to store acid rock and other toxins associated with the overburden. In the event of large snow melt and concurrent spring precipitation the lake may see sudden large volume increases. What is the plan to ensure that when such extreme events occur the earthen dams will not lose containment. The potential for a perched lake built on unstable substrate to breach must be zero not ALARP, (as low as reasonably possible,... industry speak). What safe guards will be in place to ensure no loss of containment? What worst case scenarios have been excluded from consideration? as too unlikely?	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. Management and control ponds will be designed with a spillway to convey extreme flows safely. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to inform the development of a Mine Emergency Response Plan (section 13.0). The long term stability of the dam will consider resistance to large seismic events and extreme high rainfall and snowmelt events, which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0).
IR-01-75	Anonymous, Terrace, BC	Any sane government policy purporting to address climate change CANNOT include expanding coal production in BC. If the BC government accepts this proposal, it is revealing to the public its fundamental hypocrisy and untrustworthiness.	Your perspective is noted. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. Tenas coal is for use in steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-76	Nikki Skuce, Smithers, B.C.	Document Attached: NCI_dAIR Public Comment July 2020	See separate response memo to Northern Confluence Initiative available on ePIC.
IR-01-76-a	Nikki Skuce, Smithers, B.C.	British Columbia does not have safety as the guiding principle for design, construction, operation and closure of tailings facilities. Since Mount Polley, proponents under the Mines Act are supposed to propose tailings storage alternatives that are evaluated based on social, environmental and economic considerations. While not mandated, the hope is that the cheapest option isn't always chosen at the risk to communities and watersheds. Under this section of the AIR, the proponent should also have to include alternatives to tailings storage and water discharge and treatment explicitly. In particular on tailings options given failure risks, we request that alternatives for dry stack tailings, drainage and dry coverings at mine closure, back filling, and compaction of waste in storage are assessed.	Coal processing is the separation of rock from run of mine coal and generates the coal product, Coarse Coal Rejects (CCR) and Fine Coal Rejects (FCR). This process of separation is referred to as "cleaning" or "washing". CCR is different from hard rock mining tailings where all rock is ground into fine particles (roughly to the consistency of sand) in order to extract the ore. Because coal processing does not require grinding of all rock into "sand", a conventional tailings facility is not required. The CCR and FCR produced will be combined with the Potentially Acid Generating (PAG) rock in the management ponds. For the purposes of our application, we will refer to CCR and FCR as processed rock. As per the draft Application Information Requirements (AIR) (section 1.3), an alternative means assessment will be presented in TCL'S Environmental Assessment (EA) Application for storage of PAG material which also includes several closure options, such as dry covers, wet covers, blending and treatment during operations and mine closure. The Project will be operating in line with the requirements of the Health, Safety, and Reclamation Code for Mines in BC.

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IR-01-76-b	Nikki Skuce, Smithers, B.C.	There is also a need to have transparency around decisions based on alternatives assessments. A rationale should be given for why an option is chosen or rejected. Ensuring alternative designs are considered in the AIR for tailings storage, water treatment and discharge would be critical to helping manage based on risk and safety versus solely cost effectiveness.	As described in the draft Application Information Requirements, section 1.3 Project Design and/or Alternative Means of Carrying out the Project, and section 1.4, Alternatives to the Proposed Project, will be included in TCL's Environmental Assessment Application.
IR-01-76-c	Nikki Skuce, Smithers, B.C.	Given the stage that the Tenas Project is at in their Environmental Assessment (EA) process, it should not be exempt from the new Act because of a small procedural gesture. There are many reasons that B.C.'s Environmental Assessment Act was updated. The new Act encourages greater public participation and confidence, upholds the rights of Indigenous peoples, and examines significant adverse effects in a more robust manner. There are many residents concerned about this project who are interested in being part of a Community Advisory Committee, a provision set out in the new Act. The new Act is also more in line with the enacted Declaration on the Rights of Indigenous Peoples Act. Following the old EA Act adds risk that the proponent and the province will not be fulfilling obligations under DRIPA. We recommend that the Project pursue its EA Certificate under the new (2018), as opposed to the old (2002) legislation.	Our project has been under the 2002 *Environmental Assessment (EA) Act* since November 2018. The new EA Act only came into force, with regulations, in December 2019, more than a year after our work with the Environmental Assessment Office (EAO) began. While we have elected to continue with the original process, we have always strived to exceed public consultation requirements. As an example, we have held more open houses than what is required. Through that early public engagement, we have made material changes to our project in direct response to the local community, such as building a Bypass Road. We will continue to strive to exceed the public consultation requirements - even for the new *EA Act* . Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us. We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the project. The public has three formal opportunities for input during the EA process. And as always, we welcome the community to meet with us.
IR-01-76-d	Nikki Skuce, Smithers, B.C.	The biggest challenges for mining companies are water and waste. When you live in a region where you can still drink directly from some creeks, it is a mistake to list water as a sub-component and not have it be at the heart of an environmental assessment. Surface Water, Groundwater, and Aquatic Resources should be considered Valued Components (VCs), not ICs, in the Project's EA.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using VCs only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.

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IR-01-76-e	Nikki Skuce, Smithers, B.C.	Drinking source water quality is particularly important to residents of Telkwa and others downstream of the proposed mine effluent discharge into the Bulkley River (which is upstream of the Telkwa municipal water intake). Sampling of the Telkwa River also indicates levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BCWQGs) and yet the Project proposes to discharge and hope for dilution. This despite the BC Ministry of the Environment and Climate Change stating that dilution alone is not an acceptable method for managing mine contact water. Adding further contaminants may cause further exceedance of BCWQGs and have deleterious effects on fish and other aquatic life. A thorough assessment of the creeks and rivers with sufficient baseline information is needed. Environmental baseline characterization is based on a robust 3 to 5 years dataset (currently, the dAIR mentions baseline datasets related to aquatic components such as surface water and aquatic resources that cover only 1 year of baseline sampling). The AIR needs to ensure 3 to 5 years of baseline data to be able to sufficiently assess potential impacts to aquatic life and water quality. Collecting that data also needs to be scientifically rigorous, with ample sampling and diverse monitoring sites.	New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC MOE, 2016) sampling for both monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012). We have collected aquatic resources (i.e., biota) samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC Ministry of Environment (MOE) recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016).
IR-01-76-f	Nikki Skuce, Smithers, B.C.	Telkwa Coal said it will manage dust by spraying it with a combination of chemical binding agents and water at the mine site and during transportation. What is the impact of this to groundwater and rivers and aquatic ecosystems?	Dust deposition data will be provided to the health team and other disciplines to assess potential effects in TCL's Environmental Assessment Application (sections 4.0 and 8.0).
IR-01-76-g	Nikki Skuce, Smithers, B.C.	The containment pond for potentially acid-generating rock means that monitoring may be needed in perpetuity. What are the plans for how to treat this for 500 years (as per precedent in the Yukon)?	We will monitor the water quality and water levels in the management and control ponds during operations and in closure according the BC *Acts* and Regulations. Water quality during operations and long-term closure will be modelled as part of TCL's Environmental Assessment (EA) Application, and mitigation and controls will be developed and incorporated as-needed. The management and control ponds are designed to allow total suspended solids (TSS) to settle prior to discharge. Preliminary assessments indicate the water leaving the management pond will meet water quality criteria and therefore not require additional treatment.

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IR-01-76-h	Nikki Skuce, Smithers, B.C.	With transport mostly by rail, there should also be an assessment of coal derailments and potential impacts in the Skeena watershed. A recent coal train derailment near Hazelton decimated the salmon population being rebuilt in Mission Creek. What are potential impacts, clean-up and emergency response plans?	As described in the draft Application Information Requirements (AIR) Section 9.0, Accidents and Malfunctions will be included in TCL's Environmental Assessment (EA) Application. The Project will add approximately 66 trains annually to the Canadian National Railway (CNR) line or ~1.5% increase to existing traffic. Based on the ten-year average from Transport Canada https://www.tsb.gc.ca/eng/stats/rail/2018/sser-ssro-2018.html, there are 1.09 derailments per million track miles; most derailments do not involve coal trains and those involving coal trains did not usually result in a loss of coal to a nearby watercourse. Several recent independent, comprehensive, peer-reviewed studies related to the ecological effects of residual coal due to accidental derailments over the past several years indicate that coal has minimal long term residual environmental effects to aquatic organisms in fresh water. Refer to study at the following link: https://www2.gov.bc.ca/assets/gov/environment/air-land-water/spills-and-environmental-emergencies/docs/2015-final-burnaby-lk-aia.pdf
IR-01-76-i	Nikki Skuce, Smithers, B.C.	The proposed project overlaps with the Telkwa caribou herd recovery area. This endangered species was at 32 caribou when last counted in the Fall. The blasting and impacts from mine operations could add to the stress and cumulative effects on this herd. In order to better assess those impacts, caribou need to be elevated to a Value Component in the AIR. There also needs to be cumulative effects assessment with regards to the herd.	As directed by the BC Environmental Assessment Office (EAO) Guideline for the Selection of Valued Components (VC) and Assessment of Potential Effects (2013), Subcomponents (SCs) are identified within VCs in order to aid the assessment. The Telkwa Caribou Herd is listed as a specific SC under the Wildlife VC. Potential effects will be characterized directly at the SC level, therefore there is no benefit to assigning caribou as a VC versus an SC. Cumulative effects assessment will be completed on the SC level as well (e.g., for caribou), including considering the current landscape and the future/foreseeable projects/activities. For your reference, the EAO (2013) guidance can be found here. https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf
IR-01-76-j	Nikki Skuce, Smithers, B.C.	The project needs a more robust climate impacts study. The BC Government's legislated climate commitments must be evaluated and full cost accounting of the mines impact taken into account in relation to both provincial and federal GHG reduction targets. Climate impacts also need to be integrated into all aspects of the project assessment – droughts, floods, wildfires, erosion, warming river temperatures – how will all of these impact the mine operations and how will the mine respond?	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR Section 4.1, Atmospheric Environment Intermediate Component, will include an assessment of Greenhouse gas (GHG) emissions. GHG management measures will be developed in the Air Quality Monitoring Plan (Section 13.0) to lower GHG emissions, taking into account both the provincial and federal GHG reduction targets. In addition, the long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's EA Application (section 10.0).

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IR-01-76-k	Nikki Skuce, Smithers, B.C.	Add care and maintenance plans, and ensure comprehensive reclamation and post-closure planning. Mines in British Columbia do not generally go from operations to closure. Due to commodity price fluctuations in particular, most mines experience times under care and maintenance. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan.	The Reclamation and Closure Plan will include care and maintenance procedures. This is also a permitting requirement. As temporary closures are not a planned activity, we consider that this approach provides for diligent management of the mine site and that a separate Project phase for temporary care and maintenance is not required.
IR-01-76-l	Nikki Skuce, Smithers, B.C.	Many risks associated with mining also come after the mine closes. To ensure that long-term social and environmental safety is properly safeguarded, we request that the Project's impacts be thoroughly assessed for the full post-closure period. This will require a commitment in the AIR to include comprehensive reclamation and post-closure plans on which impact assessments are based. The Province should be managing towards zero failures after mine closure and thus planning upfront is needed.	Project effects will be assessed within the temporal boundaries listed in the Application Information Requirements (AIR), including Post-closure. Environmental and social management plans will be Included in TCL's Environmental Assessment (EA) Application (AIR Section 13.0). A detailed Reclamation and Closure Plan will also be provided in the *Mines Act/Environmental Management Act* permit application.
IR-01-76-m	Nikki Skuce, Smithers, B.C.	In addition, due to the potential for acid-generating rock that would need to be monitored in perpetuity, there's both a need for a plan for hundreds of years out. A recent mine proposal in the Yukon was required to provide a 500-years plan which should become the norm for British Columbia mines that might require monitoring and treatment forever. Tenas is also a junior company with no track record, it's important for them to highlight an ability to pay full reclamation and monitoring securities for that post-closure period as well.	TCL's Environmental Assessment (EA) Application will include a Discharge Management Plan and a Reclamation and Closure Plan (draft Application Information Requirements [AIR] section 13.0). While the rock itself is not monitored, the water quality and levels is monitored for a period of time, until it can be demonstrated that levels are stable and quality acceptable. The frequency of monitoring is reduced over time. The reclamation bond put in place provides for monitoring and maintenance for an appropriate period. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-76-n	Nikki Skuce, Smithers, B.C.	The Mount Polley expert report estimated that there would be a risk of tailings failures twice every decade if the current inventory of tailings dams wasn't reduced by half and Best Available Technologies and Practices wasn't mandated. Neither of these have happened and a catastrophic event like Mount Polley would be devastating to the Telkwa and Bulkley River systems, as well as impact the Skeena Watershed beyond. We need emergency preparedness and appropriate responses outlined to also be able to evaluate the risks.	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to inform the development of a Mine Emergency Response Plan which will include disaster preparedness (section 13.0). The long term stability of the dam will consider resistance to large seismic events and extreme rainfall both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0).

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IR-01-76-o	Nikki Skuce, Smithers, B.C.	The Project comes with additional risks of over topping and failures given high precipitation and the floodplain. The Bulkley Valley has also experienced an average temperature change of 1.6 degrees of warming and significant fluctuations in predictable weather patterns. A comprehensive assessment of these hazards needs to be conducted along with identifying and planning for potential risks to the surrounding environment.	The Tenas Project is undergoing a full regulatory review through the BC E*nvironment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . Per section 10.0 of the draft Application Information Requirements (AIR), effects of the environment on the project, including potential effects associated with climate change, extreme weather events, and flooding, will be assessed. Climate change assessments for temperature, precipitation and associated flooding and evaporation will be presented in TCL's Environmental Assessment (EA) Application and results will be incorporated into engineering design and mitigation planning for water storage and conveyance as well as water quality modeling (sections 1 and 4.3).
IR-01-76-p	Nikki Skuce, Smithers, B.C.	An addition into the AIR also needs to be worst-case scenarios and modelling. How would a 100-years flood impact the mine, communities and environment? What would a catastrophic tailings failure look like in the area? How is the mine planning to address that and cover the costs?	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis will be conducted as part of the Accidents and Malfunctions section 9.0 to aid in the development of a Mine Emergency Response Plan (section 13.0). The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0). Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-76-q	Nikki Skuce, Smithers, B.C.	The dAIR outlines that it is working with the Office of the Wet'suwet'en and the Wet'suwet'en First Nation. It's unclear if that means it is following the protocols of engaging with the House group and Hereditary Chief who manages the territory where the Project is located. That should be made clear. In addition, if this Project remains in the old EA process, the Province of BC must still fulfill its commitment to implementing the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). B.C. also has an Agreement with the Wet'suwet'en and the Federal Government to move toward clear governance of the territory. As such, the Project should only receive EA approval from the Province if the Wet'suwet'en agree that free, prior, and informed consent has been achieved and agrees with the Project being developed.	Our relationship with the Wet'suwet'en is of great importance to us. From the outset in 2016, our CEO met with the Office of the Wet'suwet'en (OW), who represent the hereditary chiefs. We signed a communication and engagement agreement with the OW in early 2017. The OW granted us permission to access Wet'suwet'en territory for the purposes of conducting studies. OW technicians have had involvement in our field programs. The Environmental Assessment Office (EAO) legal procedural Section 11 order names the hereditary chiefs via the OW as the entity with which we must consult. The EAO must also notify the Wet'suwet'en First Nations. We are following the process that the OW have set out for us.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-77	Anonymous, Interior	Absolutely not. Given the destruction to the environment, the lack of need of coal and its phasing out, the destruction of pristine land that should be enjoyed by tourists and home to wildlife of all types, this project, should it be approved, will scream to the rest of the world that BC is not Beautiful British Columbia. I know how this works. You devise a linear plan with money and timeline. You assume everyone thinks like you. Here is a challenge. Before the project begins, invite an interdisciplinary group of experts in academia chemists, biologists, psychologists, educators, philosophers, nurses, lawyers, environmentalists, naturalists, parks people, tourism operators, cultural experts, historians (not just European descendants) elders, ecologists, artists. Ask for their take on the land as it is, and what it would during the mining prep, during the mining, and in 5 years. Who benefits in health, wellness, socially. Because those are the most important. Water is life. Money is not.	Your perspective is noted. We commenced engagement with the community very early on. Prior to lodging a project description with government we held two open houses in the community, and met with the Wet'suwet'en, numerous special interest groups and local residents. We have retained over 70 local scientists (biologists, geologists, archaeologists) from the Bulkley Valley to conduct the wildlife, vegetation, cultural and exploration studies. As part of our socio-economic and land use studies, we have interviewed local service providers and have collected their input. Based on community feedback, we have made material changes to our project. We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project.
IR-01-78	Fayre Lyne, Prince George, BC	I am concerned with the balance between creating new jobs and protecting our vital waters and landscape. 25 years of jobs is not a sustainable way to help a community, especially given the impacts during and post-closure. The tailings pond's used by mining and fracking companies are perpetually at risk for overflowing during rain season. In fact, spills of all sized occur all the time. Although the appropriate agencies come out to 'clean up' the spill, it has long lasting negative effects on the watersheds and surrounding plant and animal life. The fact that this particular tailings pond will be full of rock that produces acid when oxidized, should alone be the factor that shuts the mine proposal down. It takes a very small spill to lower the pH of the river nearby (from which they will be diverting water) enough to completely eliminate any sustainment of life in and around that river. The community may also be in a position where, due to lack of sustainable, long term jobs available, people are near forced to accept even the harmful projects that come their way. Not doing so may threaten their own livelihood. But being put in this position forces them to choose between two vitally important things: Money and Protecting Land. This community deserves a project that is long-lasting, produces generations worth of jobs, and a project that does not harm their land and their wildlife.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The Project is designed to minimize Acid Rock Drainage (ARD) by submersing Potentially Acid Generating (PAG) material underwater. Our Metal Leaching (ML) / ARD Management Plan (draft Application Information Requirements [AIR] section 13.0) is designed utilizing extensive geochemical characterization studies. In high precipitation events the ponds are engineered to discharge in a designed manner using the channels. The water in the ponds is anticipated to be a neutral pH as the plan is to limit ARD by submersing the material underwater. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-79	Jenn Hamm, Salmo, BC	I am opposed to this project on so many levels. Firstly this is not a local company applying for this. Secondly we need to protect all watersheds. Thirdly there are wildlife that are in need of protection there. Lastly coal is not sustainably mined and it should not be part of our future. We need local jobs in sustainable energy. To even think that this is on the table is ridiculous. Enough already! I am looking forward to a day when I can bring my kid up north to see some pristine beauty and nature. I am tired of explaining what we have done to our planet. What will future generations inherit?	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. For water and wildlife specifically, see sections 4.3, 4.4, and 4.8. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-80	Anonymous, Powell River, BC	This "project" is dangerous, unnecessary + the opposite of what we need in the world right now. Preserving what's left of our air, land, water + biodiversity is essential. NO TO TEKWA COAL!	Your perspective is noted. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-81	Anonymous, Powell River, BC	How is it we are still expanding coal mines in this day and age with what we know about climate change. Could we just get on with a more progressive energy agenda so I can feel like my little grandaughter may have a future?	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-82	Ryan Dorward, Vancouver, BC	The Telkwa mine will be detrimental to the Caribou herd up there, and it's an energy source that we need to move way beyond if we're going to do anything about CO2 emissions and climate change. Shut this project down.	Your perspective is noted. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Federal and provincial caribou biologists are part of the Environmental Assessment Office (EAO) working group. As described in the draft Application Information Requirements (AIR) sections 4.1 and 4.8, inquiries regarding air quality and caribou will be addressed in TCL's Environmental Assessment (EA) Application.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-83	Anonymous, Powell River, BC	This project totally contradicts the Federal Government's promise to move to renewable energy projects. I stand in strict opposition to this proposal.	Your perspective is noted. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-84	J. David Cox, Remote Island, BC	Coal is the original sunset industry. It is a dirty, dangerous and totally unnecessary energy source especially in this era of climate change. But, of course, someone can make a buck so we are all here debating the illogical. My strongest objection is based on fish habitat. I understand that coal kills everything over time but the first victims of coal carnage will be the few remaining salmon in what used to be the 'salmon capital' of the world but which has now become the salmon catch-and-release capital of the world. The Capitalists will take their money and buy what for dinner? Frankenfish? Do not entertain this heresy, this insanity, this further violation of the planet and all that is good. Give Pisces a chance.	Your perspective is noted. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-85	Anonymous, Vancouver, BC	From human health to the environment, the devastation brought to the world throughout the ages by the coal industry is massive. It is common knowledge that coal use must be the first of fossil fuels to be eliminated and as such is a dying industry. All one has to do is look South of the boarder to see that no amount of government intervention will bring their industry back. Everything state along our Southern border has banned the export of coal and it is to our great shame that B.C. not only continues to mine and export it, but accepts to export U.S. coal when doing so is a threat to our environment and the health of our citizens. The very idea of expanding any coal mining or export at this time is insane, and to do so in an area anywhere close to our precious salmon habitats criminal. Approval of the Telkwa Coal Mine which is only seven kilometres from the village of Telkwa which on the unceded land of the Wet'suwet'en - particularly after the violation of their sovereignty with Coastal Gas Link would not only be yet another violation of the U.N. Treaty on Indigenous Rights, but would be a slap in the face to all who are working towards reconciliation. This mine must be rejected. To do otherwise would be criminal	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to continuing to work with the Wet'suwet'en and the local community to responsibly develop the Tenas project. Our relationship with the Wet'suwet'en is of great importance to us. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-86	Anonymous, Maple Ridge, BC	It's my understanding that BC has signed on to UNDRIP, so I wonder what the Wet'suwet'en think about this project. If the Wet'suwet'en are in favour of this project, is the company prepared financially to clean up from a disaster like the Mount Polley disaster? As a taxpayer in BC, I don't want to be paying for any unnecessary disasters. Perhaps it's time the government stop approving disaster-in-waiting and start supporting green activities.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-87	Wendy Pearson, Hope, BC	The mine will likely be detrimental to the water, fish and wildlife and mining coal nowadays is very bad for the environment as we all know.	Your perspective is noted. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-88	Anonymous, Kelowna, BC	I strongly call for a full analysis of the mine's impacts on the water and fish in the area. Thank you for your attention.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-89	Antonia Mills, Prince George, BC	I am very concerned about the impact of the proposed coal mine on the health of the fish and the wildlife in the area. Coal mines are noted from environmental damage. It is strange that this coal mine which is proposed by non-Canadian companies would be making money for the owners who are not Canadian, and therefore they are not taking responsibility for the damage the mine will cause to the salmon and other fish in the Telkwa River. I lived near this area for many years and therefore am truly concerned that the health of the environment be maintained for well being of the water and the fish and for the well being of the wildlife in the area as well. This mine needs to be stopped as a through assessment is needed in this case.	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application and in particular, sections 4.6 (fish) and 4.8 (wildlife). Our commitment to operating safely and responsibly a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction.
IR-01-90	Anonymous, New Hazelton, BC	As with so many other projects in our region, including the CN work to increase rail traffic, the public is not able to access credible impact studies. I am hoping to see a FULL analysis of this project's impact on water and on fish populations. With so many projects happening at the same time, I would also like to see an analysis of cumulative impacts of all projects in five years, in ten years with a wide range of scenarios. For example, worst case scenario where each project has a spill that contaminates water during a sensitive part of the life cycle for fish. Thank you.	The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . In particular, refer to sections 4.3 (water) and 4.6 (fish). TCL's Environmental Assessment (EA) Application will have a cumulative effects assessment (see draft Application Information Requirements section 3.8) should one be required for a particular component. This will include potential cumulative effects of past, present, and reasonable foreseeable developments that may interact with the Tenas Project.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-91	Brendan Elliott, Peterborough, ON	For me, leaving a comment regarding the negative consequences of an open pit coal mine is similar to asking for comments before passengers in a restaurant light a cigarette. So I will leave a comment for that. Please do not allow smoking in this restaurant. From the scientific literature it is clear that second hand smoke will increase mortality rates and yet I know that we do not want to do that. Even if your patrons are willing to take on the risk the waitresses do not, as well as some of the non-smoking regulars. They do not want to suffer. They do not want to die before their time. The problem are the negative externalities. The problem is that others will not choose the food scarcity, desertification, extreme weather events, a widening of disease vectors and lose of biodiversity. Poll the world's poorest people living along the equator. Ask for comments from the 150 million projected climate refugees. But that would make no sense. Why poll those who would suffer from your actions? That would be like asking people in a restaurant if it would be ok for you to light a cigarette.	Your perspective is noted. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, your inquiries will be addressed in the atmospheric (section 4.1) and human health (section 8.0) chapters of TCL's EA Application.
IR-01-92	Anonymous, Burnaby, BC	I am very concerned about the risks to salmon from acid rock contamination, posed by the proposed Telkwa open-pit coal mine. I urge you to undertake a full analysis of the mine's potential impacts on water and fish.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans (including a metal leaching/acid rock drainage management plan) chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-93	Anonymous, Vancouver, BC	Were any charges, federal or provincial, ever laid against Imperial Metal for the Mt. Polley, the biggest mining disaster in B.C.? Again, a foreign-owned corporation “convinces” BC &/or federal politicians that, although by declaring bankruptcy it could walk away paying nothing for any damages it may cause, it would be a good investment to create an open pit coal mine so close to a town, a salmon bearing tributary, a tourist area and a caribou protected area. It took Kamloops residents several years to stop the same type of project proposed by Ajax for an open pit gold/copper mine just outside their city limits. Wake up!	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Your perspective is noted. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Assessment. Our commitment to operating safely and responsibly through the life of the mine is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-94	Anonymous, Victoria, BC	There are so many reasons this mine should not proceed! It is an environmental disaster in the making. Because coal generates large amounts green house gases, this project should not even be considered. It will not help BC meet it's GHG reduction targets. We are responsible even if the coal is burned elsewhere. Can't we find a sustainable energy project that creates jobs? There are also dangers to a pristine environment, including water, fish and wildlife. In particular I am concerned about salmon which is already under pressure in many parts of the province. Salmon is precious and must be protected. Perhaps people in the close by towns will be impacted by the dust. The pristine environment attracts tourism which is a much cleaner industry and provides good revenue to the local community. Tourism is a much better alternative to coal mining. Not only was the community not consulted about this project, the company refused to allow people who will be impacted to be included. Is this the type of company we want operating in BC? As a taxpayer I am tired of paying to clean up the messes left by mining companies. The required bonds are inadequate. Do not approve this coal mine - it makes no sense environmentally, financially or economically.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised including greenhouse gas (GHG) assessment (section 4.1) will be addressed in TCL's EA Application. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). It is inaccurate to say that the community has not been consulted. Prior to lodging a project description with government, we held two open houses in Telkwa, met with the Wet'suwet'en, numerous special interest groups and local residents. Based on community feedback, we have made material changes to the project. We have retained over 70 locals (biologists, engineers, geologists, archaeologists) to conduct the water, wildlife, vegetation, cultural and exploration studies for our Project. As part of our socio-economic and land use studies, we have interviewed local government, service providers for their input into TCL's EA Application. We are following the environmental assessment process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. In addition, the community is able to provide comments directly at three milestones in the process. We will be required to post a financial bond prior to construction as part of the permitting process with the final amount to be determined by the Government of British Columbia.
IR-01-95	Jane Barroll, Vancouver, BC	Again a foreign-owned corporation proposes an open pit mine within a couple of kilometres of a town. The residents should be deeply concerned about health risks due to dust, explosions, acid leaching from the mine tailings into the water, into a salmon bearing tributary and protected caribou area. The negative effect on tourism, Agriculture and quality of life cannot be overstated. No charges were laid against Australian-owned Imperial Metals for the Mt. Polley mine disaster- the biggest in BC history- and a corporation can walk away from any negligence by declaring bankruptcy.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-96	Rhondi Hurlbut , Valemount, BC	Please do not even consider this proposal. The impacts on the environment are complex and devastating but even worse so unnecessary. When will the calls for green technology be given more than lip service by our governing bodies.	We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-97	Anonymous, Lasqueti Island, BC	I believe that a full analysis of the mine's potential impacts on water and fish must be implemented before proceeding. Thank you	Your perspective is noted. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . In particular, refer to draft Application Information Requirements sections 4.3 (water) and 4.6 (fish).
IR-01-98	Anonymous, Vancouver, BC	I'm very concerned about this potential coal mine's effect on the vital Skeena Valley salmon, especially given it's importance to the Wet'suwet'en and other Indigenous Nations. Mines are notorious for acid rock leaching into nearby water drainage. This mine would be perilously close to salmon spawning and migration routes on the Skeena and Telkwa Rivers and creeks draining into them. It should not be allowed!	Your perspective is noted. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted as part of TCL's EA Application. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0). We will continue to work with the Wet'suwet'en and follow the process they have set out for us.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-99	Anonymous, Telkwa, BC	It appears that on the noise impact study area map that the intersection of Coalmine Rd. and Lawson Road is not included. This intersection would become very busy if the new haul road becomes the main way to access the proposed mine. I would like to see numbers of trucks of all sizes, buses, and various industrial equipment that will be using the road, and the impact on noise and dust and safety that this will have. I was told at one of the open houses that a lot of traffic would be using the back road to Houston. I find this hard to believe. Please make sure this is addressed in EA. I was also told by a consultant at an open house that the mine sits on a big clay basin. I think this differs from geological studies which show fractured shale in the area. Please make this discrepancy clear as well. Water studies which show that warming of the Telkwa river may occur need to also come with a guarantee that this will not adversely affect resident fish. Is there enough water in the watershed to clean the coal and fill the ponds, and maintain existing river levels?	(1/2) The intersection of Telkwa Coalmine Road and Lawson Roads is outside the regional study area as noise levels due to the project would be below noise guidelines. A Minesite Traffic Control Plan will be included in TCL's Environmental Assessment (EA) Application (section 13.0). As described in draft Application Information Requirements (AIR) section 4.1, the Atmospheric Environment was originally selected as an Intermediate Component (IC), but will now be a Valued Component (VC). We initially followed the Province of BC guidance [https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf] on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Atmospheric component assessment will outline the subcomponents, key indicators and pathways along which potential effects could occur. These subcomponents include assessment of air quality, greenhouse gas (GHG) emissions and noise during each phase of the Project. Indicators for the noise subcomponent include changes in noise levels (e.g. daytime; nighttime; low frequency).
IR-01-99	Anonymous, Telkwa, BC		(2/2) In section 6.1, transportation is identified as a subcomponent of the Infrastructure and Services VC. The indicator for this subcomponent is a change in the level of service (road, rail, traffic patterns and infrastructure). A traffic count report (6.1.2), mitigation of the potential effects, such as proposed construction of a Bypass Road, will also be included in TCL's EA Application. The Ministry of Transportation and Infrastructure is on the Environmental Assessment Office (EAO) Working Group. They have reviewed our preliminary plans and provided direction regarding mitigation. We will incorporate their advice into our designs. Silt and clay dominate overburden is located on the northeast and eastern side of the proposed pit area. Thin deposits of silty sand and gravel overlying bedrock are present on the pit's south side. Temperature effects to the local waterways will be assessed in TCL's EA Application. A water balance will be provided in TCL's EA application that will account for water use. Potential effects to water will be assessed as per section 4.3.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-100	Betsy Bahrenburg, South Burlington VT	I am writing to call for a full analysis of the mine's potential impacts on water and fish!	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-101	Jeff Burgess, Smithers, BC	I have strong reservations about the proposed Telkwa Coal Mine. Discharging any sort of industrial mining byproducts into one of the more pristine river systems in the Canada is foolish. The byproducts of the coal mining process are toxic, longs lasting and harmful to many organisms exposed to them. I have lived and worked around a coal mine in Alberta (which included trips on a frequent basis to the mine site - both an underground mine and open pit) and was dismayed by the immensity of the impact of the coal mining process. The effect on local wildlife and the forest ecosystem and the disregard, or perhaps impossibility of preventing runoff from the mine from entering the river there (as it flowed out of the mountains) was startling. No amount of reclamation could rectify the damage done. With fisheries in our region being seriously effected already, additional pressure on the health of the river systems is, at the very least, questionable. Surely, the advantages we have living in such a beautiful and relatively pristine area needs to be preserved for the long term and not compromised for short term financial gain. Coal mining is increasingly been phased out in many places in the world, at least in part for some of the reasons listed above. We would do well to move in that direction. Sincerely, Jeff Burgess	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0). We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-102	Anonymous, Vancouver, BC	Need to stop tenas coal and do a full environmental study.....	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. The Tenas Project is undergoing a full environmental assessment/regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . We are currently in the pre-application phase which means our EA Application is yet to be submitted.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-103	J. Chalifoux , Edmonton, Alberta	Coal is climate suicide.	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbine, solar panels).
IR-01-104	Anonymous, Salmon Arm, BC	I am opposed to the coal mine for the following reasons. First when we built our home in Telkwa in 1986 we dug a well and found water at about 14 feet . The ground water flowed from the direction of the proposed mine directly to the Telkwa River. It was clear cold pure drinking water which we used for our home. How can you not negatively affect contaminating the ground water (then into the Telkwa - Bulkley - Skenna) in spite of best efforts to seal settling ponds from leaching acid . What about all the residential wells in the area ? Have studies shown that the ground water will not be affected by mine construction since most of the ground in that area is porous gravel and susceptible to leaching ? The second reason . Are we really willing to risk the future of a world renowned Steelhead and salmon river such as the Bulkley and Skenna rivers for generations to come for a mere 25 years of industry ? With most returning fish stocks in B.C. in decline are we willing to further jeopardize the health and future of this natural resource? What is the economic benefit of the sport fishing industry over the next 100 years compared to a 25 year mine lifespan with potential long term financial debt to the taxpayers of British Columbia from acid control and containment for the next generations. I have enjoyed many days fishing all of these beautiful rivers including the Telkwa for Steelhead and salmon and it would be wrong to ruin this for short term economic gain considering the potential loss.	Our strategy for potentially acid generating (PAG) rock is to limit it from forming acid by submerging it under water. This strategy will be implemented through the Metal Leaching/Acid Rock Drainage Management Plan (draft Application Information Requirements [AIR] Section 13.0), which is developed utilizing extensive site-specific geochemical characterization studies. We agree that steelhead and salmon species form a critical part of the fabric that binds and support the community in the Bulkley Valley; and that healthy and stable water quality and quantity are fundamental to healthy aquatic ecosystems. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project.
IR-01-105	Anonymous, Prince George, BC	NO MORE COAL MINING, BURNING OR WATER DESTRUCTION!!!! NO MORE, JUST NO MORE!!!!!!!!!!!!!!!!!!!!!! 😠😠😠😠😠😠😠😠😠😠😠😠	Mining exists to meet the demands of society. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting the regulatory requirements, and to operating in a safe and environmentally responsible manner.

Tenas Coal draft			
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IR-01-106	Gesche Stabenow Nordmann, Aabenraa, Denmark	I cannot believe that it is till going on, that men is still ripping the earth! When will you wake up? We are a part of nature. We all are! What we do to nature will come around to us. Stopp mining now. Take care of the rivers, of salmon, of mother earth - because you cant eat money!	Mining exists to meet the demands of society. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting the regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-107	Anonymous, Kamlooops BC, Canada	A proposal to mine 'Coal' in the headwaters of the Skeena River. What year is this, 2020 or 1820? I call for a full environmental analysis of the mine's potential impacts on water and fish.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting the regulatory requirements, and to operating in a safe and environmentally responsible manner. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . There are also numerous other pieces of legislation, regulation, policies and technical guidance documents and a number of permits or licenses are required prior to operations. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-108	Christopher Forsythe, Winnipeg, Manitoba	We need to concentrate on renewable energy and not environmentally damaging energy such as coal mines. The Danish energy company Orsted has re-invented itself to be from renewable energy and it now has valuation closing in on BP. I think this is a good example of how renewable energy companies can be profitable while still protecting the environment. A coal mine simply has no place in our future. It is not needed. I call for a full analysis of the mine's potential impacts on water and fish. Lets protect our fisheries and our future. Sincerely, Christopher Forsythe	Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).

Tenas Coal draft			
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IR-01-109	Sheila Harrington, Lasqueti island	All aspects of this project must be thoroughly reviewed. 1) its location is in unceded Wetsuwetan territory already impacted by unauthorized corporate tresspass. All permissions from traditional and elected chiefs must be received. 2) full impacts on ecosystem must be shown: fish, water, air, carbon from loss of trees and birds and amphibians and insects that pollinate other plants. 3) economic: it is doubtful that coal is economical energy given public willingness to use coal nor mitigating the above impacts.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access the Wet'suwet'en territory for the purposes of conducting studies for our project. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application.
IR-01-110	Anonymous, Smithers, BC	I could never support a mine that has such a high risk of polluting, never mind the fact that coal is a fossil fuel which has very little future in the greener energy movement.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-111	Anonymous, Toronto, Ontario	Canadians call for a full analysis of the mine's potential impacts on water and fish	The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-112	Anonymous, Haida Gwaii	Please no. Is it not 2020, and coal has been proved an outmoded filthy fuel?	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-113	Anonymous, Portland OR	Please pause approval for this project. BCs salmon and fish habitat are important not only for Canada but for the entire west coast — and the people and wildlife that need them. This mine makes no sense and is not worth the risk by any measure. Please avoid the mistakes of the US and shut it down!	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).

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IR-01-114	Bryan Sohl, Ashland, Oregon, USA	I travel to the Skeena River annually for steelhead fishing. I inject a significant amount of money into the local economies of Smithers, New Hazleton, and the Kispiox Valley annually in my pursuit of steelhead. This region is world famous for it's steelhead and salmon fishing and beauty. A coal mine and the real and potential environmental degradation that occur secondary to mine operations are not worth the risk to this region. This region is First Nations homelands and their opinions must be respected. Please do not move forward with this mine. Respectfully, Bryan Sohl MD Ashland, OR USA	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-115	Patrick Butler, Terrace	I oppose this project for two reasons. Firstly, the mining and burning of coal will release tons of carbon dioxide into the atmosphere. Should the coal veins contain methane, that will be released. Both Carbon dioxide and methane are greenhouse gases causing climate change. Secondly, any mining activity in the Skeena River watershed will have a negative impact on fish populations in the area. Coal mining releases heavy metals that inhibit biological systems. Any copper released impairs the homing response of salmon. Besides being food, salmon support the sport fishing industry which returns more dollars to BC than commercial fishing. The forests around the rivers, which mop up Carbon dioxide, are nourished by bear skat. This comes from bears eating salmon. Protecting salmon is vital to ameliorating the effects of climate change.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0). As noted in section 4.1 of the draft AIR, the atmospheric environment will be assessed. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-116	Robert Budd, USA	I am an American but I visit Skeena Country twice a year. Depending on the year I may pay up to one thousand dollars per steelhead that I catch. This is figuring payments to Air Canada and Canadian outfitters. I wish for once the economic value of wild salmon and steelhead would be weighed against a project like this. This proposal can only have a detrimental effect. Why would we jeopardize the fishery further? Please leave Skeena country alone!	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As per the draft AIR, fish (section 4.6), and socio-economic (sections 5.0 and 6.0) will be addressed in TCL's EA Application.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-117	Margot Van Kleeck, Terrace BC	I oppose the mining of coal in all of Canada and am opposed to this mine proposal in our area of NW British Columbia. The actual mining of the coal and then the transportation of this coal are major contributors to environmental damage and climate change. Secondly the Skeena River is an important fish habitat and the the mine will have a negative impact on the already reduced and stressed salmon population. I think the government should only give permission to new proposals that are projects providing safe, clean, renewable energy. Thank you.	Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-118	Paul Drabble, Burnaby, BC	The time for mining coal is over and we need to move on to more sustainable energy sources that have less impact on the landing and water. Who really benefits from these projects? The companies, their executives and shareholders will reap huge profits while the land and water systems are defiled, including our precious and fragile salmon runs and all the life that depends it. It's just an opportunity for a company to move in, tear up the land, exploit our resources, disrespect the First Nations' rights and wishes and leave a huge, irreversible mess and pollution. As we saw with the Mt Polley spillage DISASTER, the land was destroyed and till this day no one has been held accountable. This pattern of destruction and corporate greed needs to end.	Mining exists to meet the needs of society. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions. Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. As described in the draft Application Information Requirements sections 4.0 to 14.0, topics, such as fish and land, will be addressed in TCL's Environmental Assessment Application.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-119	Onni Milne, Vancouver, BC	(1/2) I send this comment to ensure that the proposed Telkwa coal open-pit mine is REJECTED. The world does not need another coal mine. Coal is NOT the future. Last year, Canada and BC declared that we were in a climate emergency. Adding another coal mine to the climate crisis is a recipe for total disaster when coal is a major pollutant for carbon emissions. Then, there is the issue of salmon which will be affected by this mine when salmon are a foundation of BC's economy and First Nations culture. Then, there is First Nations sovereignty and the ability to govern their land which will be ignored again if this proposal succeeds. The proposed mine site is located 7 kilometres from the village of Telkwa on Wet'suwet'en territory. It is situated near two creeks that flow into the Telkwa River which flows into the Bulkley, a main tributary of the Skeena. There is great risk to salmon from acid rock contamination. This is not what salmon need if there are going to survive for the next seven generations plus. The mine site is located 7 kilometres from the village of Telkwa on Wet'suwet'en territory. It is situated near two creeks that flow into the Telkwa River which flows into the Bulkley, a main tributary of the Skeena. There is great concern about the risk to salmon from acid rock contamination. With current low salmon return numbers, this could signal extinction of our precious resource.	Your perspective is noted. As described in the draft Application Information Requirements (AIR) sections 4.0 to 14.0, the topics raised will be addressed in TCL's Environmental Assessment (EA) Application. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . There are also numerous other pieces of legislation, regulation, policies and technical guidance documents and a number of permits or licenses are required prior to operations. Our relationship with the Wet'suwet'en is of great importance to us, and we signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for our studies. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the OW have set out for us. The OW are part of the government EA working group. We have invested many hours characterizing fish habitat and identifying fish use of aquatic habitats within, adjacent to and downstream of the project to enable an assessment of the potential effects of the project on aquatic ecosystems and their inhabitants. TCL's EA Application incorporates detailed water quality and quantity modeling (sections 4.3, 4.4, 4.5, 4.6). The water management strategies are designed to minimize changes to downstream water quality.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-119	Onni Milne, Vancouver, BC	(2/2) Governments are lured by employment numbers offered by a project. I suggest that 150 jobs during construction and 170 workers at peak operations for a maximum 25-year lifespan of the proposed mine are not worth the poisoned land and water which are a result of such a project. In addition to post-closure reclamation, submerged potentially acid-generating rock would need to be monitored in perpetuity. The government collected $1.6 Billion in bonds from mining companies to cover an estimated $2.8 Billion in reclamation. When mining companies declare bankruptcy, taxpayers make up the difference. I choose to spend the $1.2 Billion difference to deliver services that BC residents need, not cleaning up a mess that should never have occurred. Dust and noise from blasting, trucks and machinery place nearby residents at great risk of health issues. Coal dust can travel up to five kilometres from the mine site, covering the land around it. How do chemical binding agents and water sprays at the mine site and during transportation affect the health of workers and residents who live and work in the area? What has been considered in terms of cumulative effects of extractive projects on Wet'suwet'en territory? Looking at one project only does not show the whole picture. A Coastal GasLink project here. A coal mine project there. Without Free/Prior/Informed Consent of First Nations. No recognition of the UNDRIP declaration made in the BC legislature last year. How much is enough? What will it take to push the STOP button on this project? This is a good time to do so - for the planet, for our future. With Hope For REAL Change Now,	New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC MOE, 2016) sampling for both monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012). We have collected aquatic resources (i.e., biota) samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC Ministry of Environment (MOE) recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016). The geochemical characterization studies on this project is extensive with several programs and collection of hundreds of continuous samples from drill holes. These characterization studies have been used to develop a thorough understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed appropriately. The mine will operate according to the Metal Leaching/Acid Rock Drainage management plan that is being prepared as part of TCL's EA Application (see draft AIR section 13.0). We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-120	Dave Stevens, Smithers BC	I'm concerned to see adjacent and more distant continuous monitoring of particles and gases, especially acute levels. Even short term exposures to high levels (I'm thinking of explosive events) can do lasting harm. A geographically dense network of low cost monitors for PM can ground truth dispersion models and should be put in place. The assay results of volatile substances and potentially transportable particles needs to be understood before permitting proceeds.	Regional and Project-specific air quality stations have informed the baseline for air parameters of potential concern as well as chemical assay testing of coal, overburden, and quarry material. Key criteria air contaminants (sulphur oxides, nitrogen oxides, volatile organic compounds, particulate matter and ammonia) as well as metals and Polycyclic Aromatic Hydrocarbons (PAHs) will be included in the air dispersion model to predict local and regional effects and will be part of the health assessment (draft Application Information Requirements section 8.0). Blasting emissions are included in the air dispersion model. The Air Quality Management Plan is included in section 13.0.
IR-01-121	Henry Hutter , Winlaw BC	No Coalmine outside Telkwa please ! The environmental poisoning on everything will be huge , from fish to wildlife to humans . When will we ever learn ?	As described in the draft Application Information Requirements (AIR) sections 4.0 to 14.0, environmental, economic, social, cultural, and Wet'suwet'en rights and interests topics will be addressed in TCL's Environmental Assessment (EA) Application. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

Tenas Coal draft			
Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-122	Dory Spencer , Masset, Haida Gwaii	I am opposed to open pit mining. BC already has scars and side effects of industrial harmful effects on environment and wildlife all from open pit mining that are going to exist forever. No mine should be allowed to operate without a very substantial financial deposit into a remedial clean up and restoration of the waterways, forests, lands impacted by mine activities. No government or tax contributions from Canadians should be used for said mining operations.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. As described in the draft Application Information Requirements (AIR) sections 4.0 to 14.0, environmental, economic, social, cultural, and Wet'suwet'en rights and interests assessments including a reclamation program (draft AIR section 13). The Project cannot be constructed without posting a financial bond with the Government of British Columbia.
IR-01-123	Anonymous, Prince George, BC Canada	I am firmly opposed to this plan for coal mining. We can no longer continue to depend on fossil fuels, and it is vitally important to the health of our global ecosystems that we transition to a more sustainable future as soon as possible. The long term environmental risks of this project far out weigh the short term economic growth. Yes, the local economy does need employment, that can be found in developing and managing the new resource industries that replace fossil fuels moving forward. The proposed plan for coal mining this region threatens the health of our already damaged and sensitive ecosystem, specifically the caribou recovery plan and the water systems which support the yearly salmon runs. This is a time when BC needs to protect and nurture the forests, water ways, and wildlife more than ever. And with global carbon emissions driving the changing climate and creating extreme weather patterns we need to reduce reliance on fossil fuels. I know I'm maybe not the best at presenting my thoughts, but I am passionate about the environment, the economy, and humanity	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. This includes water quality and quantity and physical interactions with fish habitat, such as water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plans (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0), and air quality and greenhouse gas (GHG) emissions (section 4.1). Federal and provincial caribou biologists are part of the Environmental Assessment Office (EAO) Working Group; section 4.8 of the draft AIR notes that caribou will be included in TCL's EA Application.
IR-01-124	Anonymous, Surrey	Why are we going backwards - our Earth/environment is more important than a short term resource depleting project. No - our land, water, air and people's health and future are more important than another horrible coal mine. The fact that this company rejected current environmental guidelines means they are not trustworthy - another Mt. Polley? No No No!	Your perspective is noted. The Tenas Project is undergoing a full environmental assessment / regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . We're in the pre-application phase which means the Environmental Assessment (EA) Application is yet to be submitted. Our project has been under the 2002 EA Act since November 2018. The new EA Act only came into force, with regulations, in December 2019, more than a year after our work with the Environmental Assessment Office (EAO) began. We have elected to continue with the original process as is allowed under the new legislation and regulation. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

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IR-01-125	Anonymous, Witset, BC	The planet does not need more coalmines or coal to burn. There is no doubt that to us the mine will impact the local fresh water sources including the Bulkley River which flows into the Skeena etc. etc. etc. The planet with the human and other creatures does need to have clean water. An open pit mine is an insult to most peoples' intelligence.	Thank you for your perspective. As described in the draft Application Information Requirements sections 4.0 to 14.0, the topics raised, such as water, will be addressed in TCL's Environmental Assessment Application. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-126	Neal and Janelle Erickson, Hazelton, BC	(1/3) July 21, 2020 Environment Assessment Office 836 Yates Street Victoria, BC Re: Tenas Project by Telkwa Coal Ltd. We are writing to voice our opposition to Telkwa Coal Ltd.'s proposal to develop an open pit coal mine, the Tenas Project, in Telkwa, BC. Not only are we down stream residents along the Bulkley River, but we are also the parents and grandparents of a young family that lives in Telkwa close to the proposed open pit site. This project is located close to the main residential area of the Village of Telkwa; adjacent to the Telkwa River, a tributary of the Bulkley River [Widzin Kwa]; and overlaps with sensitive territory crucial to the survival of the Telkwa Caribou herd. The proposed mine will have a number of potential negative impacts which are not sufficiently offset by the benefits Telkwa Coal suggests will flow from their project. The main access route to the proposed mine site is along Coalmine road. Coalmine Road cuts through the largest residential subdivisions in the Village of Telkwa. These neighborhoods are quiet with no industrial or commercial traffic. In order to access the mine site a huge increase in truck and heavy traffic will be necessary. Coalmine Road is characterized by families walking along it at all times of the day, children playing and riding their bicycles along its edges, and is safe for young children to use unsupervised. The change in traffic necessitated by this proposal will make Coalmine Road unsafe for these uses. The noise, dirt, and dust created by the increased traffic and coal haulage will degrade the environment and ability of residents living along the road to enjoy their properties. In winter months Coalmine Road has significant snow banks that narrow the road way, and requires extra care and caution to safely use.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Currently, there is no commercially available method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While

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IR-01-126	Neal and Janelle Erickson, Hazelton, BC	(2/3) The mine's location adjacent to the Telkwa River is cause for great concern to the safety and sustainability of fish and wildlife dependent on the Telkwa River, as well as the Bulkley and Skeena Rivers down stream. The company has provided all kinds of reassurance that tailing ponds, rock acidification, coal dust and other negative biproducts of coal mining are adequately protected and will be properly remediated. However, as we have seen and experienced over the years and very recently at Mount Polley, these reassurances and promises are often inadequate, insufficient, or ineffective. When disaster happens it is the fish, the wildlife, and the people of the province who pay the price. The Telkwa, Bulkley, Skeena, and their tributary rivers are too valuable and culturally too significant to risk for the sake of the short benefits contained in this proposal. The proposed mine site overlaps and is adjacent to the Telkwa Caribou Herd recovery area. Mine traffic, blasting, coal dust, noise and the disruption to the surrounding area will be significant stressors to this endangered herd. Decades of effort to maintain the viability of this historic herd could be undone very quickly, and no good will or remediation plan will bring these important animals back once lost.	ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). During the life of the Project, there will be a demand for metallurgical coal. We will construct and use a new Bypass road. This decision was a direct result of early feedback from the community. Traffic for the mine will use this route, once constructed. Dust emitting sources will be assessed from the minesite, haul road and rail infrastructure including blasting, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements [AIR] sections 4.1 and 13.0). Noise modelling will be conducted to predict potential noise effects from activities at the minesite, haul road, and rail loadout. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0). We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-126	Neal and Janelle Erickson, Hazelton, BC	(3/3) Telkwa Coal Ltd. claims that their mine will generate approximately $250 million dollars in revenue to the federal, provincial, and local levels of government over the estimated 25 year life of the mine. While 250 million dollars is a lot of money, spread over 25 years and three levels of government, $10 million dollars per year is actually not that much. Is the Government of British Columbia really prepared to risk so much for so little? Finally, as we witness year after year of extreme weather events, intense and more frequent hurricanes, disruptions to the Jet Stream, and numerous other "natural" disasters caused by climate change; do we really need another coal mine? Surely at this point in history we have seen the consequences of over reliance on fossil fuels in general and on coal in particular. There are other fuel and technological alternatives to coal for power and metal smelting. Now is the time for industry to transition away from coal to more modern, cleaner, and environmentally sustainable options. For all of these reasons, and for the health, safety, and well-being of our [and your] grandchildren living just down the road from this mine, we urge the Government of British Columbia to deny Telkwa Coal a permit to proceed with this development. Respectfully, Neal and Janelle Erickson, Hazelton, BC	

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IR-01-127	Anonymous, Telkwa Area	(1/6) To: Environmental Assessment Office Re: Proposed Telkwa Coal Ltd, Tenas Project I am submitting this in response to the Environmental Assessment for Telkwa Coal Ltd. Proposed Tenas Project EAO application. As a resident in the Telkwa area, though not personally opposed to mining or even coal mines in general, I do have the following concerns with Telkwa Coal's above-mentioned proposal. 1) Dust - Every mine generates a certain amount of dust. Though Telkwa Coal emphatically states they will have dust under control, in reality it is impossible to mitigate all dust generated by mining, especially open pit mining. A friend who had lived at Tumbler Ridge when the mine was in operation, informed me that dust was a major problem for them. Ie. 5 cm of coal dust about 2 km from the mine site and continual dust buildup at their house 15 km from the site. Sparwood is a coal mining town with continuous dust problems as described in a Free Press article Mar. 23/19 "Air quality has been an ongoing issue for the mining town as dust events at Elkview Operations leave homes and cars coated in a film of black coal dust...." Blasting, processing, hauling, loading and unloading coal all produce dust. This is very concerning to me as a resident downwind from this project - our location ensures that we will have significantly more dust than we do at the present time. This will increase the particulate matter which we already have a problem with in the Bulkley Valley air-shed. Do we really want more dust added to the already existing problem? Furthermore, prevailing winds in the area of the Tenas Project are towards Telkwa.	
IR-01-127	Anonymous, Telkwa Area	(2/6) The question is not if there will be more dust in Telkwa due to the proposed mine, but how much dust will they generate? How will this dust affect the health of Telkwa area residents, especially those closer to the mine, haul road and loading site, the elderly and those with respiratory problems? Telkwa Coal says they will use water to mitigate dust yet in this area we experience freezing temperatures during the winter, how will they try to keep dust down then? What of the effects of dust cover on the snow, causing it to melt earlier in the spring? How will this affect our present ecosystem? Many questions, no real answers! In addition to the above-mentioned dust generators, Telkwa Coal's plan to stockpile coal near the CNR line and to load trains with loaders is another obvious source of dust that they are not really taking seriously.	

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IR-01-127	Anonymous, Telkwa Area	(3/6) 2) Effluent water into the salmon bearing Skeena river system - The Tenas, Four, Goathorn, Telkwa, Bulkley and Skeena are salmon bearing waterways. Telkwa Coal proposes to pump a certain amount of effluent into this natural waterway. How will this affect the already dwindling salmon runs on these rivers and streams? Telkwa Coal proposes to build dams to create a mine waste containment pond for water used in it's operations. This pond, according to their open house figures is a little smaller than Tyhee Lake. We have seen breaches in containment ponds at more local mine operations eg. Huckleberry mine, Bell and Noranda mines and needless to say Polly mine south of here. How would a breach of this pond be prevented and if it were to happen what would be the effect on the existing salmon habitat? How would it affect the pristine waters of the Telkwa, Bulkley and Skeena Rivers. This tailings pond would remain in place in perpetuity, who will look after it when Telkwa Coal done mining and gone?. Some residents nearer to the mine site have wells near to the Telkwa River, how would this effluent effect their drinking water?	Thank you for your perspective. We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. TCL's Environmental Assessment (EA) Application will address inquiries in sections 4.0 through 14.0. Potential dust emitting sources will be assessed from the minesite, haul road and rail infrastructure. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed and an Air Quality Management Plan will be developed (see draft Application Information Requirements [AIR] sections 4.1 and 13.0). The concerns being raised are specifically being addressed in detailed modeling. Water quantity and quality are being evaluated with respect to the projected conditions, and will consider a range of potential outcomes and water management strategies (section 4.4). Various locations along Four, Tenas, Goathorn, Telkwa and Bulkley River are being modeled and evaluated. Discharge locations and timing will be subject to government requirements. Air quality modelling (section 4.1) will also be included. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's EA Application (section 10.0). In addition, a dam break analysis (section 9.0) will be conducted to aid in the development of a Mine Emergency Response Plan (section 13.0). Consideration of climate change, and effects to human health, cultural heritage, and environmental effects will also be included. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being Valued Components per section 6.5 of the draft AIR.
IR-01-127	Anonymous, Telkwa Area	(4/6) 3) Noise - Blasting, processing and hauling all create noise. We live in a relatively quiet community. Though Telkwa Coal assures us that this will not be a problem. When will these operations take place? Will the noise keep us awake at night? How will the noise affect the wildlife of the area? 4) Proximity to already existing communities. The above-mentioned towns of Sparwood and Tumbler ridge were created specifically for workers in the mines to reside. ie the towns were built because of the coalmines. Telkwa Coal says the fact that two roads in the area named Telkwa Coalmine Road and Aveling Coalmine Road proves that this was an already existing coalmining area. Though this is true at first glance, the previous coalmines were miniature in comparison to what Telkwa Coal is proposing. The comparison might be like someone saying a major subdivision has a right to be approved because there had been a previous trappers cabin in the area!	

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IR-01-127	Anonymous, Telkwa Area	(5/6) Telkwa and Smithers have come to existence due to farming, tourism, forestry, government workers, railway workers as well as mining. (And note that these mines are far from either settlement. Neither Telkwa or Smithers were built as mining towns. Just the fact that they use the previous mines as a reason that the present proposal should be approved makes me nervous, the above-mentioned issues of dust, effluent, noise and wildlife are real factors that cannot be addressed by sketchy maps, platitudes and catchphrases. (To illustrate - the proximity of the proposed works to residential properties in and around Telkwa are not included in their maps or videos thus giving the impression that there is very little impact on the community). You might notice that the uncompensated people residing nearest to the mine have the most reservations about it. We were here before them and they have an obligation to compensate or move those they will negatively affect by the intrusion of this mine.	
IR-01-127	Anonymous, Telkwa Area	(6/6) 5) Expanding to Goathorn and Telkwa North proposed coal reserves in the area - Though little if anything is said in their open house information about their other (much closer) coal reserves in the area, their Allegiance Coal website mentions the above-mentioned reserves as possible areas of expansion. Once they have the infrastructure in place, it will be much more difficult to say no. Once the foot is in the door it is almost impossible to close the door! 6) Real Estate values to those nearer the mine site - When I approached Telkwa Coal Director Mark Gray on this subject he said he thought real estate prices would go up if the mine should be approved. I believe this may be true for those on the other side of the valley but definitely not for those closer to the mine. To illustrate: I asked a friend - who lives in the Valley but far away from the project - if he was for the proposed mine and he said yes. When I asked him if he would be for it if he lived where we do he said no, he would not be for the proposed mine in that case! Need I say any more? Consider: would you want this mine in your back yard? I would encourage all of us, including those at Telkwa Coal to heed the words of Jesus spoken some 2000 years ago. "Do to others whatever you would like them to do to you." Matthew 7:12	

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IR-01-128	Grace Salez, Victoria, BC	Surely in 2020 the answer isn't a coal mine? Only Trump could think of going backwards in resource extraction. We must think of the environment and how to clean up not mess up! Grace Salez	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-129	Anonymous, New Hazelton	There are enough threats to salmon habitat and river systems in general without the addition of an open coal facility in such a sensitive environmental region. I am hugely disappointed that the BC government is even considering such a project. This will be fought to the bitter end, and further strain relations within Indigenous territories, wasting time and resources that could so easily be directed into sustainable energy options. This is not the age of fossil fuels nor should tax-payers money be squandered by fossilized attitudes.	Thank you for your perspective. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Our relationship with the Wet'suwet'en is of great importance to us. The Office of the Wet'suwet'en have granted us permission to access Wet'suwet'en territory. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TLC's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-130	R. Lynn Shervill, Powell River, BC	Why are we mining more coal when a huge part of the Western world is implementing renewable sources of energy in an effort to save the planet? Our friends in countries like The Netherlands and Germany, leaders in sourcing renewable energy, must feel betrayed by a supposed ally blatantly undermining their efforts. Is it not time environmental assessment decision makers took a global approach to their jobs rather than continuing to embrace a 'tunnel vision/follow the money' path' . Please stop Telkwa Coal and do Earth a favor.	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

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IR-01-131	Sheila Peters, Powell River, BC	Salmon is one of our most important resources and this project, with its likelihood of producing acid mine drainage, is a terrible threat to that resource. As well, why in the world are we even considering mining coal? its days are done. Do not allow this project to proceed.	Your perspective is noted. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-132	Anonymous, Smithers, BC	The importance of clean water, steelhead, salmon, wildlife and tourism are vital to our community and way of life. I would like to see a full environmental assessment on this project. I am opposed to this mine going ahead, the risks are too great to our world class rivers.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* .
IR-01-133	Carmen Nikal, Smithers, BC	(1/2) I am concerned about several impacts that the proposed coal mine would have on the land. water and air as well as the people of the Bulkley Valley in which the proposed coal mine is situated. One major concern I have is the impact of potential metal leaching and/or acid rock drainage on not only the land around and near the proposed mine but also on the water (surface as well as groundwater) in the surrounding watershed area. The discharge of water used to wash the mined coal would be released directly into the Telkwa River, and any seepage or overflow from the holding/impounding pond would eventually enter the Telkwa River. The Application Information Requirements (AIR) does not provide details on how the operations would remove any dissolved deleterious minerals (including cadmium, zinc, lead and selenium) from water that enters the watershed purposely or accidentally.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted and documented in the EA (draft AIR sections 4.3, 4.4, 4.5, 4.6). A strategy for the management of Potentially Acid Generating (PAG) has been selected to reduce the risk of Acid Rock Drainage (ARD), which will be discussed in TCL's EA Application. Water quality modeling includes consideration of mining activities, including the handling of processed and mined rock, and discharge of water to the receiving environment. Model predictions are used to evaluate water treatment requirements. Management plans (section 13.0) will be provided which describe response and actions to address Accidents and Malfunctions (section 9.0) Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and

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IR-01-133	Carmen Nikal, Smithers, BC	(2/2) The Telkwa River and it's watershed provides not only safe water but also migrating salmon and other species to communities ranging from Telkwa through the Bulkley Valley to communities along the Bulkley and Skeena Rivers, all the way to the Pacific Coast. This source of high quality water and fish cannot be sacrificed for a coal mine operated by a company which has shown limited details in the AIR on how it could address events such as abnormally heavy rain and/or snowfalls, storms, floods, drought and ever increasing unpredictable aspects of climate change that would impact the water it plans to withdraw and/or release during and after use. Telkwa Coal/Allegiance Coal is a small company with limited financial resources to address long term major events that require them to enact measures to prevent contamination to the water. A more comprehensive water management plan is needed, as is greater assurance that Telkwa Coal could actually finance any needed and possible long term/indefinite remediation in the event of any accidents/malfunctions in operations.	rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed and an Air Quality Management Plan provided (draft AIR sections 4.1 and 13.0) The draft AIR does not go into specific details about how the assessment will be conducted as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-134	Anonymous, British Columbia	Have we learned nothing about care for this earth we share with all living things? Open pit coal mining is a filthy polluting business, that destroys environment. It causes grave respiratory illnesses, of which there is a long record of historic proof around the world. We are not so desperate for energy that we should resort once again to this foul source of energy. If we do resort to it this will simply demonstrate the foolishness and heedlessness of human greed yet once more. Do not go there.	As described in the draft Application Information Requirements (AIR) sections 4.0 to 14.0, the topics raised will be addressed in TCL's Environmental Assessment Application, including human health (section 8.1). We recognize the need to reduce emissions to help meet climate objectives. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-135	Anonymous, Calgary, Alberta	Please do a full environmental assessessment of this project on fish and the water. Thank you	The Tenas Project is undergoing a full environmental assessment (EA)/regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

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IR-01-136	Robert Beemer, Jackpine Rd, Telkwa	I am concerned that as per 6.4, sub component , "public recreation use", the existence of a mine on the plateau between goathorn and four creeks will prevent all access to the Hunter basin area which has been a favourite hiking destination of our family for 30 years.	Public access is subject to legislation and regulation. A public access plan will be presented in TCL's Environmental Assessment Application subject to government requirements (see draft Application Information Requirements [AIR] section 13.0).
IR-01-137	Anonymous, Terrace BC Canada	The proposed coal mine is harmful to the environment. Economics need to take a back seat. Look to the future. Clean air. Clean water.	Thank you for you perspective. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's EA Application (particularly for air and water, sections 4.1, 4.3, and 4.4).
IR-01-138	Robert Beemer, Jackpine Rd, Telkwa	As per section 9 in the Dair ,"accidents and malfunctions" I am very concerned with the construction of a dam to hold back water to cover toxic PAG, potential acid generating rock. The stability of the ground here has already been noted. This body of water will be 300 m approx above the valley floor and in the event of a dam fail which is not unheard of that toxic water will be in Telkwa in no time. This would be catastrophic.	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0). In addition, a dam break analysis (section 9.0) will be conducted to aid in the development of a Mine Emergency Response Plan (section 13.0). It is important to note that Potentially Acid Generating (PAG) rock is not toxic unless parameters are leached in sufficient quantities to exceed toxicity thresholds in downstream receptors. PAG means rock has potential to produce acidity. Whether PAG rock becomes acid generating or not, depends on how these materials are managed. The Metal Leaching/Acid Rock Drainage management plan (referred to in section 13.0 of the draft Application Information Requirements [AIR]) is to place PAG rock underwater to minimize oxidation of sulphide minerals. Changes to water quality (draft AIR sections 4.3 and 4.4), are being assessed as part of a detailed and integrated geochemical, hydrogeological and site wide water and load balance.
IR-01-139	Robert Beemer, Jackpine Rd, Telkwa, BC	As per section 4 of the Dair Environment effects Assessment I am worried that we will no longer be able to hang our laundry or eat our vegetables without washing the coal dust off them. This would be unacceptable.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described by the draft AIR section 4.1, air quality will be assessed in TCL's EA Application. Additionally, air and water quality modelling results will be incorporated into the human health assessment (draft AIR section 8.1).

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IR-01-140	Anonymous, Telkwa, BC	An open pit mine of this magnitude will be devastating to our air and water shed, both of which are already compromised. The close proximity to our community poses further reasons for deep concern. There exists volumes of research identifying the devastating impact of coal mining on human health and well being and all aspects the environment. Please, please do not allow this project to go forward.	TCL's Environmental Assessment Application will assess potential effects of the Project on air quality (including PM10 and PM2.5) and water quality (see draft AIR sections 4.1, 4.3, and 4.4). Mitigation measures will also be considered. Air and water quality modelling results will be incorporated into several effects assessments, including human health (draft AIR section 8.0).
IR-01-141	Eugen Wittwer W Diamond Ranch , Telkwa BC	W Diamond Ranch is located next to the proposed coal load-out. Over the last 25 years we have built a grass based cattle ranch that sells the finished product to local consumers. The current load-out plan is insufficient in protecting groundwater and dust control. Clean water and forage free of coal dust are essential to this ranch. Contamination of water or air would make it impossible to grow field crops(oats wheat lentils hemp) for human consumption. If the project should go ahead as proposed it would kill our livelihood and destroy about 10 full time jobs.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements [AIR] sections 4.1 and 13.0). Air and water quality modelling results will be incorporated per the draft AIR in the human health (section 8.0) and biophysical (section 4.0) effects assessments. We will continue to work with our neighbours to minimise project effects.
IR-01-142	Paul Sanborn, Prince George BC	The local specifics of this particular project are largely irrelevant to the real issue here: no additional coal mining, anywhere, makes sense if we're serious about preventing catastrophic climate change. This project should never have reached this stage if the federal and provincial governments were doing their jobs. Shame on them!	Your perspective is noted. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-143	Marlies Fleck, Telkwa, BC	The site for the proposed loading/unloading station is a very important area where each spring and fall thousands of migratory birds (cranes, geese, swans and ducks) find rest on their journey. The dust and water pollution from the coal will certainly affect these birds from finding rest and landing there. We live close to the proposed loading station and are concerned for our groundwater to get polluted (our drinking water!!!!) along with the fields where cattle grazes and the land is actively being used for cultivating crops. It would be heartbreaking to see the hard work of my family destroyed by pollution from a coal mine.	The avian baseline program noted the use of this staging area for migratory birds which, as indicated, is near to the loading/unloading site and to the existing rail line. This topic will be further analyzed in the wildlife effects assessment (draft Application Information Requirements section 4.9), which will include context from the dustfall predictions. Groundwater will be assessed in section 6.4.

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IR-01-144	Anonymous, Smithers	I lived in Windsor Ont. 5o yrs. and I became very aware of how pollution affects our bodies. Windsor had and still has some of the worst air in Canada and USA because of coal burning industries coal mining in both countries. According to my dr. and several specialists I was and still am a very healthy person never having smoked or did drugs , I didn't asma or any other lung disease, therefore stated that my lungs were effected by fine particulates of industrial air pollution.on smog days I could not venture outside as I felt like I had a 600 lb gorilla on my chest. since I was familiar with Hazelton and smithers having been raised in Hazelton till the age of 10 I knew the here would be much better than in ont. so my wife and I made the very hard decision to leave our adult children and moved to smithers.Now i am saddened to hear about this coal mine wanting to set up in smithers. I worry that the coal dust caused by this mine would do great harm to the good are we now enjoying here. there is no way they can control the coal du.st	Potential dust emitting sources of concern will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed. Air (section 4.1) and water quality (sections 4.3 and 4.4) modelling results will be incorporated per the draft Application Information Requirements in the human health assessment (section 8.0).
IR-01-145	CD Clarke , Oldwick, NJ	Due to the continuing decline of salmon and steelhead in BC and elsewhere I think it is imperative that a full scale analysis of the impacts of this mine on fish,wildlife and ecosystems should be undertaken before it is allowed to move forward.	The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application.

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IR-01-146	Jeremy, Telkwa, BC	In addition to the long term risks to the watershed voiced by many others, I am also concerned with air pollution, noise pollution, lost recreational assets, and road safety challenges associated with this project. While our our government does not have specific regulations in place, I believe it's worth considering how much diesel fuel will be burned during the life of the project in moving all of that material (overburden, coal, construction). I don't think the benefits of this project would make me proud to be using all of those resources and contributing so much to further climate change. More locally, the project would also drastically change an area that currently offers peaceful and beautiful recreation for nearby residents and tourists alike. Having these opportunities close to Telkwa will have even greater importance in coming years as the era of driving cars becomes less economic and more costly to the environment. Taking a more immediate view of the proposed project, the increased truck traffic (fueling, supplies, 170 workers every day) on Lawson and or Telkwa Coal Mine roads should be seriously considered. Lawson road has many curves and hills with limited sight distance and is used by residents for commuting (bicycle and car), fire wood collection, and recreation.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. In particular, air quality and noise are captured in atmospheric environment (section 4.1), tourism is considered in economic development (section 5.2), and traffic is considered in infrastructure and services and human health (sections 6.3 and 8.0). - Based on early feedback from the community, we decided to build a Bypass Road at the outset rather than using Telkwa Coalmine Road for coal haul. We will reduce traffic where possible, for example, by utilizing crew buses. The Ministry of Transportation and Infrastructure is on the Environmental Assessment Office (EAO) Working Group. They have already reviewed our preliminary plans and provided direction regarding mitigation. We will incorporate their advice into our designs.
IR-01-147	Anonymous, Telkwa, BC	Dear EAO, I would like to request that the AIR include a full impact assessment (including comprehensive baseline inventory plus projections into the future) that the mine development and mine operations will have on ground water, the Telkwa and Bulkley rivers and aquatic and land species, including salmon. This should include any acid rock drainage, selenium, heavy	(1/2) This public comment period is focused on the draft Application Information Requirements (AIR) or the "table of contents" for TCL's Environmental Assessment (EA) Application, not the actual EA Application. This is the first of three Environmental Assessment Office (EAO)-led public comment opportunities. We are currently in the pre-application phase which means TCL's EA Application is yet to be submitted. Inquiries will be addressed in the EA in the next phase of the process. Section 4 of the draft AIR includes water quality predictions for metals and nitrate as well as an evaluation of potential bioaccumulation of selenium in aquatic and terrestrial species. New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC MOE, 2016) sampling for both monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012).

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IR-01-147	Anonymous, Telkwa, BC	metals, and blasting byproducts like N03 and nitrates. I also request that the AIR fully addresses the risks of increases in N03 and toxic bioaccumulation in algae, insects, fish (salmon) and birds. Thank you, A very concerned Telkwa resident opposed to the project	(2/2) We have collected aquatic resources (i.e., biota) samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC Ministry of Environment (MOE) recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016). The geochemistry studies for this project are extensive. Industry best practices (e.g., MEND 2009, INAP 2009) have been followed. The mine will be operated according to the metal leaching/acid rock drainage (ML/ARD) Management Plan (draft Application Information Requirements section 13.0). A geochemistry baseline report being prepared by registered professional geoscientists will also be submitted with the application that specifies the characterization methods and geochemical testing results.
IR-01-148	BC Backcountry Hunters and Anglers, British Columbia	(1/2) The attached letter outlines the significance and importance of the fish and wildlife habitat to the BC Backcountry Hunters and Anglers Organization. The British Columbia Backcountry Hunters and Anglers (BCBHA) is a rapidly growing organization of hunter-conservationists. Our organization has recently learned of the new construction proposed for the Tenas Project by Telkwa Coal Limited near Telkwa, BC. The BCBHA is especially concerned about the impact to the acknowledged caribou habitat in the near vicinity of this proposed project. This project is also founded on a productive tributary of the Bulkley and Skeena Rivers, home to recognized cultural and recreational fisheries. The potential for disruption of high value wildlife movement and habitat connectivity, as well as the fragmentation of the directly adjacent wilderness from this proposal is significant. The effects that this project could impose onto the surrounding fish and wildlife habitat is not confined to the proposed project border. The proposed mine area footprint is found within the Critical Habitat Area identified in 2014 by the Minister of Environmental and Climate Change Canada and is immediately adjacent to core critical habitat identified for the Telkwa Caribou Herd. The Telkwa Caribou Recovery Area is recognized as a critical component in the conservation of the caribou herd. Threats to the viability of this habitat by increased industrial activity in the near vicinity may be significant and should be addressed.	Thank you for your input. The Tenas Project is undergoing an environmental assessment/regulatory review through the BC *Environment Assessment Act* , the BC Mines Act and the BC *Environmental Management Act* . In addition, there are dozens of other ancillary licenses and permits we will obtain prior to construction. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. Fish and fish habitat (section 4.6 of the draft Application Information Requirements) and wildlife (section 4.8) habitat in the context of this project's potential effects and the cumulative effects on the Valued Components (VCs) will be included in TCL's Environmental Assessment (EA) Application. The VCs (including fish and fish habitat as well as wildlife) were identified with consideration of the recreational and biodiversity values

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IR-01-148	BC Backcountry Hunters and Anglers, British Columbia	(2/2) The BCBHA also recognizes the economic opportunity for the Village of Telkwa and the surrounding area and the history surrounding coal mining in the region. However, the regulation of the environmental impacts of development must adhere to a standard acceptable to British Columbians. The management of natural habitat for all wildlife species in British Columbia is one of the core values of the BC Backcountry Hunters & Anglers. Our organization firmly believes that effective and healthy habitat is critical in order to sustain wildlife populations and provide high quality hunting, fishing and backcountry recreational opportunities for future generations. We respectfully request that Government of British Columbia consider our request for the fish and wildlife habitat to be closely studied and be comprehensively reviewed during the environmental assessment period. Document Attached: BCBHA Telkwa Coal	and biodiversity values. TCL's EA Application will adhere to the standards of the BC EA Act process including working group review. We are committed to adhering to best management practices to mitigate potential effects of the project on these and other important environmental values.
IR-01-148-a	BC Backcountry Hunters and Anglers, British Columbia	The BCBHA is especially concerned about the impact to the acknowledged caribou habitat in the near vicinity of this proposed project. This project is also founded on a productive tributary of the Bulkley and Skeena Rivers, home to recognized cultural and recreational fisheries. The potential for disruption of high value wildlife movement and habitat connectivity, as well as the fragmentation of the directly adjacent wilderness from this proposal is significant.	The selection of Valued Components (VCs) and Subcomponents (SCs) reflects these values (through the VC and SC selection). The assessment will analyze the potential for disruption of wildlife movements and alteration to habitat through the indicators identified for the wildlife SCs as is specified in section 4.8 of the draft Application Information Requirements.
IR-01-148-b	BC Backcountry Hunters and Anglers, British Columbia	The effects that this project could impose onto the surrounding fish and wildlife habitat is not confined to the proposed project border. The proposed mine area footprint is found within the Critical Habitat Area identified in 2014 by the Minister of Environmental and Climate Change Canada and is immediately adjacent to core critical habitat identified for the Telkwa Caribou Herd. The Telkwa Caribou Recovery Area is recognized as a critical component in the conservation of the caribou herd. Threats to the viability of this habitat by increased industrial activity in the near vicinity may be significant and should be addressed.	The assessment area for caribou includes the area identified by Environment and Climate Change Canada (ECCC) in 2014 that you reference. The assessment will include analysis of project-related effects as well as cumulative effects within this area. Similarly, the fish and fish habitat (section 4.6) as well as the wide-ranging wildlife and wildlife (section 4.8) regional study areas extend well beyond the actual project area. Please refer to the figures in the draft Application Information Requirements.
IR-01-148-c	BC Backcountry Hunters and Anglers, British Columbia	The BCBHA also recognizes the economic opportunity for the Village of Telkwa and the surrounding area and the history surrounding coal mining in the region. However, the regulation of the environmental impacts of development must adhere to a standard acceptable to British Columbians.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . There are also numerous other pieces of legislation, regulation, policies and technical guidance documents and a number of permits or licenses are required prior to operations.

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IR-01-148-d	BC Backcountry Hunters and Anglers, British Columbia	The management of natural habitat for all wildlife species in British Columbia is one of the core values of the BC Backcountry Hunters & Anglers. Our organization firmly believes that effective and healthy habitat is critical in order to sustain wildlife populations and provide high quality hunting, fishing and backcountry recreational opportunities for future generations.	One goal of our project design is to adhere to the mitigation hierarchy to avoid, minimize, restore and if necessary, offset effects. The components of TCL's Environmental Assessment (EA) Application described in the draft Application Information Requirements will include a Reclamation and Closure Plan (section 13.0). The end land use goal, reflecting current and past land uses, is multiple-use forest ecosystems including wildlife habitat, recreation, the potential for forest harvest in appropriate areas, and traditional land uses.
IR-01-148-e	BC Backcountry Hunters and Anglers, British Columbia	We respectfully request that Government of British Columbia consider our request for the fish and wildlife habitat to be closely studied and be comprehensively reviewed during the environmental assessment period.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR section 4.6, Fish and Fish Habitat and section 4.8, Wildlife, will be included in TCL's EA Application.
IR-01-149	Anonymous, Sherwood Park , AB	I would hope with the decline of fish stocks, particularly salmon that there is no question as to whether a full assessment of the effects of any effluent that will be released into any natural water body. Not doing so would be grossly negligent of any company, the regulating bodies and the gov't.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR (BC EAO 2020) section 4.3, Surface Water, section 4.4, Groundwater, and section 4.6 Fish and Fish Habitat will be included in TCL's EA Application. The Tenas Project is undergoing a full regulatory review through the BC *Environment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* . There are also numerous other pieces of legislation, regulation, policies and technical guidance documents and a dozen more permits or licenses required prior to operations.
IR-01-150	WMIOV, Telkwa, Coalmine Rd.	We as human beings cannot afford the dangerous health consequences of any problems that may result from this mine. Thank you, Linda Curphey Document Attached: Summary WMIOV Comments on dAIR.pdf	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR section 8.1, Human Health will be included in TCL's EA Application.

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IR-01-150-a	WMIOV, Telkwa, Coalmine Rd.	1. Size Matters When Telkwa Coal first proposed this project, it stated that its plan was to develop an open-pit coal mine producing 240,000 tonnes of coal per annum (tcpa) of product. This production level happened to be just under the then existing Provincial Environmental Assessment threshold of 250,000 tcpa. WMIOV and others complained to the Ministry about what seemed to be a transparent attempt to get around the EA process. Telkwa Coal then revised its proposal and submitted a draft mine plan identifying the mine project's objective to be 750,000 tcpa. However, since then, in its public statements to the business community contained in its Corporate Reports, Telkwa Coal has repeatedly stated that its true objective is to "ramp up" to 1.35 million tonnes per year. (See, e.g. Allegiance Coal (Telkwa Coal's Corporate parent) Corporate Presentation, May 2020, p. 8.) Despite this, the Environmental Assessment office continues to review this proposal as if it were for a mine producing at the 750,000 tcpa level. So which is it? If 1.35 million tonnes, it simply does not make sense for the Environmental Assessment to take place based on misinformation about the scope of the project. Size matters because it affects all of the potential environmental and social impacts. Just as one example, while Telkwa Coal currently describes its proposed water usage for cleaning coal as 15,000 litres per hour, under the 1.35 million tonne scenario, usage would have to be almost twice that. What effect will this have on toxins, water runoff, water sources, capacity to control acid rock drainage (ARD) and cumulative effects? RECOMMENDATION: That the EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.

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IR-01-150-b	WMIOV, Telkwa, Coalmine Rd.	(1/2) 2. Water and Fish Water - The dAIR relies on what are known as Valued Components (VC). These are the attributes and potential areas of concern that are most important in judging the mine proposal's merits. Surprisingly, Water is not identified in the dAIR as one of the Valued Components. Instead, it is considered an Intermediate Component (IC). ICs can be ignored in the final analysis, as long as the VCs they are related to (in this case fish) are sufficiently protected or, even if there are ill effects, those effects can be adequately mitigated. In other words, as long as there are not unacceptable risks to the fish or if mitigation is possible, then protecting water will not be a priority under the current dAIR. Water has both high societal value and high ecological value and therefore should be selected as a Valued Component as part of this Environmental Assessment, and not just as an Intermediate Component. Our rivers and our water quality are of immense historical and cultural importance to the people of the Bulkley/Wetzinkwa Valley. The attempt to diminish that importance in the review of this project is frankly surprising, especially given the quite serious risks the project poses to these treasured parts of our heritage.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are kev elements of the effects assessment that will be conducted. As described in the draft AIR. these

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IR-01-150-b	WMIOV, Telkwa, Coalmine Rd.	(2/2) Fish – The boundaries for review under the dAIR are limited to the Telkwa and a short stretch of the Bulkley just down stream from the confluence. Given the importance of the rivers and the fish, as well as the significant threats that already exist to fish survival, this seems quite inadequate. In addition, while the dAIR refers to relying on current science-based thresholds for contaminants that pose a risk to fish, those thresholds may not be sufficient to actually protect fish stocks. Our fish runs are already imperilled. Levels of heavy metals in the Telkwa are already significant. We suggest that the impact assessment include a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed. RECOMMENDATIONS: • That Water be treated as a Valued Component in the dAIR. • That the boundaries set for analysis of adverse effects include the entire Skeena system. • That the precautionary principle be applied due to the pre-existing threats to fish survival. • That the AIR call for a review of the latest scientific literature and analysis to help determine appropriate thresholds for fish toxicity, including sub-lethal effects.	[illegible] topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) Project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .

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IR-01-150-c	WMIOV, Telkwa, Coalmine Rd.	3. Water Usage - Rivers, Creeks and Underground Sources A coal mine of this nature requires the use of large volumes of water for washing the product (as noted above, according to Telkwa Coal 15,000 litres per hour at the 750,000 tonne per year production rate). The washing of the coal will take place alongside the mine site. Telkwa Coal claims that it hopes to obtain enough water from the neighbouring creeks, runoff and underground sources to meet its needs in this regard. If not, it will draw from other sources in the Regional District. We assume this means the Telkwa River because what other nearby sources are there? Neighbours are also concerned that the use of underground sources will deplete the wells they rely on for their household water supply. RECOMMENDATION: The AIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa Coal provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	The draft Application Information Requirements (AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the dAIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As identified in the draft AIR sections 4.3 and 4.4, surface water and groundwater are components of TCL's EA Application with their subcomponents of quantity and quality. As well, fish and fish habitat are included as components in the EA (draft AIR section 4.6). These chapters will be presented in TCL's EA Application along with a water balance. The water balance model will consider climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses have been included to further strengthen the positive water balance for the water covers.
IR-01-150-d	WMIOV, Telkwa, Coalmine Rd.	(1/2) 3. Acid Rock Drainage and Metal Leaching a. Tailings Impoundment - Separation of Materials Telkwa Coal acknowledges that its operations will produce significant quantities of Potential Acid Generating (PAG) materials. PAG results in Acid Rock Drainage if exposed to the elements. There is also a substantial risk of leaching of heavy metals. Heavy metals are highly toxic to fish. To prevent ARD, Telkwa Coal must separate PAG from non- PAG and then remove the PAG from contact with the environment forever. Telkwa Coal's current plan is to create a containment pond or ponds alongside the mine and place the PAG material and other toxic sources into this containment area and cover it with water. The resulting tailings impoundment(s) will cover an area about 1/2 the size of Tyhee Lake and about 40 metres deep.	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's EA Application. The geochemical studies for this project are extensive with several characterization programs and

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IR-01-150-d	WMIOV, Telkwa, Coalmine Rd.	(2/2) To carry out this plan, Telkwa Coal must separate the PAG material and the non-PAG material. The PAG material would then be submerged in the containment areas and the non-PAG material would be piled alongside the mine pit and impoundment areas. However, according to one of the reviewers during the similar Manalta project in the mid-1990's, it is highly unlikely that such a separation process could work. Even if the separation could occur, it would take a considerable amount of time for this to take place. What happens to the acid generating material in the meantime since, as soon as the material is exposed to the environment it starts acidifying and, thus, creating polluted runoff? b. Tailings Impoundment - Containment Plan Once the Acid Rock generating material is submerged in a containment lake, it must be preserved there forever. Reviewers during the Manalta process thought that, given the topography and underlying geology of the area, including the faults and fractures that exist there, it is unlikely that the impoundment would successfully retain the ARD material and/or heavy metals. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of the application. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.

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IR-01-150-e	WMIOV, Telkwa, Coalmine Rd.	(1/3) 5. Water Treatment - Heavy Metals and other Toxins The mine area contains heavy metals which are toxic to fish. In addition to Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc, there is an open question about the amount of selenium that will be produced. During the Manalta process, the reviewers concluded that the amount of selenium would be below Provincial threshold levels. However, since that time, the thresholds have been lowered due to findings about fish toxicity. a. Removal of heavy metals and other toxins The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the Province. We know from the experience at the Teck mines in the Elk Valley that even the most advanced and expensive technology for removing selenium does not work. Telkwa Coal proposes to treat water runoff from its operations by cleaning it to a point where it supposedly does not pose a risk to the river and the fish and then to pipe it to the Telkwa River for discharge. Will it be possible to successfully treat and clean the runoff?	The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project. Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements. As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use
IR-01-150-e	WMIOV, Telkwa, Coalmine Rd.	(2/3) b. Discharge to Telkwa River Even if Telkwa Coal could successfully clean the runoff, how will dumping it into the Telkwa affect water temperature, water flow and other factors critical to water quality and the fish? The proposed project would discharge mine impacted water directly to the Telkwa River. Sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these metals would cause further exceedance of BC WQGs in the Telkwa and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water. c. Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved materials that are present. There are many industrially proven methods for treating mine contact water of this nature to remove dissolved species.	

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IR-01-150-e	WMIOV, Telkwa, Coalmine Rd.	(3/3) RECOMMENDATIONS: • Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. • Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. • Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .
IR-01-150-f	WMIOV, Telkwa, Coalmine Rd.	6. Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this may be relevant for the Tenas project is in PAG material handling. Pit capacity must be available at the same time as PAG material is generated in order to avoid temporary surface storage. RECOMMENDATION: That Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.

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IR-01-150-g	WMIOV, Telkwa, Coalmine Rd.	7. Caribou The Telkwa Caribou herd is listed under the Species at Risk Act and is identified as at threat of imminent extirpation. The herd is currently at approximately 34 animals. To prevent extinction of the herd, a Wildlife Management Area was recently created in the Telkwa Mountains. The long term goal is to restore a mature forest with limited disturbances in the form of logging, road building and further habitat destruction. The Telkwa Coal Mine location is almost completely within the Telkwa Caribou Wildlife Management Area. It will result in a removal of a substantial area of re-growing forest and create a haul road that will cross a part of the recovery zone. Coal hauling trucks will pass along this road somewhere between every 5 and 10 minutes. The establishment of the mine is inconsistent with the Caribou recovery plan and will prevent the return of undisturbed mature forests in the area. As a consequence, it will put further pressure on a herd that is already on the brink just as it starts to recover. RECOMMENDATION: That the AIR should require an assessment of the likely impact on the success of the Caribou recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd (TCH), the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-150-h	WMIOV, Telkwa, Coalmine Rd.	8. GHG Emissions – Full cycle including methane and alternatives While Telkwa Coal identifies this project as intended to produce coal for steelmaking (metallurgical coal) and not for energy production (thermal coal), this does not resolve the question of its effect on greenhouse gas emissions. 90% of the CO2 contained in metallurgical coal is released during the steel making process. Steel making itself is responsible for somewhere between 5 and 10% of total greenhouse gas emissions worldwide. Meanwhile, the world is moving away from using coal for steel production and ghg free methods are starting to be implemented. Also, because the coal seam in Telkwa is associated with coalbed methane, there is a possibility of substantial methane releases during the mining of the coal. In order to determine the total greenhouse gas impact of this project, the dAIR should require a full review of all releases throughout all stages of development, production, transportation and use. RECOMMENDATION: That the AIR require sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also requires information as to whether there are alternatives to using coal in steelmaking that will produces less harmful effect on the environment.	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.

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IR-01-150-i	WMIOV, Telkwa, Coalmine Rd.	9. Air – Dust So far, air quality issues have not been addressed in any significant way. As news from Sparwood, B.C. establishes, running a coal mine can produce a significant amount of coal dust: http://www.cbc.ca/news/canada/british-columbia/sparwood-teck-coal-mine-1.4696904 https://www.thefreepress.ca/news/teck-to-compensate-sparwood-residents-for-dust/ Sources include blasting, as well as dust blown off waste piles and trucks and while loading and operating railroad cars. So far, we have not heard any significant discussion about how the dust would be controlled at the Telkwa mine site itself. In regards to transportation from the mine to the loadout by truck and from the loadout to the port by train, Telkwa Coal has referred to covering the product with some form of latex material, but there are no details. Even with such a system, coal dust from rail cars can still be a problem: https://www.columbiavalleypioneer.com/news/coal-dust-escaping-rail-cars-spurs-b-c-petition/ The Bulkley Valley already suffers from poor air quality. Our average PM 10 is also a problem, mostly from road dust in the spring. How will the blasting, processing, transportation and storage of the coal impact our air quality, especially given that the mine site is generally upwind from Telkwa and Smithers? RECOMMENDATION: That Air Quality should be treated as a Valued Component and the dAIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, the review should take place with the objective of preventing any further degradation of air quality.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements sections 4.1 and 13.0). We initially followed the Province of BC guidance {https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance.
IR-01-150-j	WMIOV, Telkwa, Coalmine Rd.	10. Noise - Amount/Distance Obviously, between blasting and heavy truck traffic, the mine and loading operations will produce a significant amount of noise. So far, it appears that the only studies about how much noise will be produced are based on computer simulations. Together with the environment, the quality of life issues valued most by area residents focus on our quiet rural lifestyle (see Regional District Rural Official Community Plan Survey results, 2012). RECOMMENDATION: That noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed using methods that reasonably reflect real life conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements, these will be covered in sections 4.1, 4.8 and 8.0.

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IR-01-150-k	WMIOV, Telkwa, Coalmine Rd.	11. Load Out – Flood Plain/ Haul Road impact According to the Regional District map, the proposed loadout facility site is on a Bulkley River floodplain. From personal experience, we know that this site is subject to flooding from the River. So, the potential is there for flood waters to wash stored coal into the Bulkley. Tenas Coal's plan is to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas Coal intends to store the wash coal on the ground, this land will be polluted for years and the only way to clean it will be to remove the soil. The haul road's planned path crosses the Helps Creek wetlands watershed for 7 km. We think this wetland and creek should be getting the same consideration asTenas, Four and Goathorn Creeks. Our concerns here, in addition to the impact on caribou, are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek. As noted in the Caribou section, the haul road is also directly inconsistent with one of the main objectives of the Caribou recovery plan, which is to eliminate and not expand linear disturbances and to allow the herd to use the lower elevation forests in an undisturbed fashion. RECOMMENDATION: That the dAIR include a requirement for a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(1/2) As described in the draft Application Information Requirements (AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan.
IR-01-150-k	WMIOV, Telkwa, Coalmine Rd.		(2/2) Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd. The draft AIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the ALR.

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IR-01-150-l	WMIOV, Telkwa, Coalmine Rd.	12. Recreation/Life Style impact Recreation is mentioned under the VC for land and resources. Outdoors recreation is one of the main features of the quality of life which Bulkley Valley residents value. The Hunters Basin/Hankin Plateau area is important to horseback riding and hiking enthusiasts. The mine site sits on top of the only access road into these areas. Will access be protected? RECOMMENDATION: That the dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a considered as subcomponent under the Land and Resource Use Valued Component (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in infrastructure and services (draft AIR section 6.3). The application of mitigation measures is part of the environmental assessment process, and will be considered accordingly in the assessments, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of TCL's Environmental Assessment (EA) Application. In advance of TCL's EA Application, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in the EA Application subject to government requirements (section 13.0).
IR-01-150-m	WMIOV, Telkwa, Coalmine Rd.	13. Telkwa Coal Ltd. Finances and Bond Allegiance Coal, the company behind the Tenas Project, is a thinly capitalized Australian company with a weak financial position. The following information publicly available as of 2020-6-23 shows Allegiance Coal trading at a price of 7 cents per share, and that it has a market capitalization of only 40.28 million ASD, cash on hand of only 1.43 million ASD, with a debt of 2.32 million ASD, and a negative cash flow of 1.86 million ASD over the twelve trailing months. It has never operated a coal mine. If there were an accident or malfunction at the mine, or if an accidental release from the containment area occurred after the mine entered its reclamation and post-closure phase, then a reasonable question is: what resources are available to minimize the environmental and social impacts of the possibility of the company's inability to pay? RECOMMENDATION: • The AIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. • All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.

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IR-01-150-n	WMIOV, Telkwa, Coalmine Rd.	14. Jobs and Economic Opportunities The dAIR refers to the jobs that would be created through the coal mine project. However, much of the economic opportunities that have arisen in the Bulkley Valley during the last few years have come from such sources as tourism, recreation, amenity migration, home construction and real estate. All of these sectors depend in whole or in part on the preservation of a lifestyle connected to nature and natural beauty. The introduction of an open pit coal mining operation with its associated noise, dust and effects on the natural world will obviously have some negative effects on these economic sectors. For instance, what impact will it have on property values, air and noise pollution and the fishing based tourism economy? RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4) . Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (draft AIR section 6.5).
IR-01-150-o	WMIOV, Telkwa, Coalmine Rd.	15. UNDRIP BC has adopted the principles of the UN Declaration on the Rights of Indigenous People. Those principles are applicable here since the mine site sits on the territory of the Wet'suwet'en people. RECOMMENDATION: All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the OW have set out for us.

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IR-01-151	Anonymous, Smithers	(1/2) 1. Air Quality Dust control – We are concerned about the amount of dust that would be produced by this operation. Dust of this nature will have some degree of toxicity because of it's chemical nature and the particle size. The threat is not only to humans but also wildlife in the area (including the Telkwa Caribou herd). We need to know what the proponent plans to do to ensure that no threat will be posed by emissions. Applying dust suppresant (if you do plan to do this) would have limited success because there is material being moved all the time and moving machinery will disturb any applied dust suppressant. How do you plan to overcome this? I also wish to point out that asking the public to come up with solutions to the threat of environmental problems is a fallacy. This should be the responsibility of the proponent and it should be the responsibility of the Ministry to ensure that the environment is protected. Air quality monitoring – Ambient air monitors are not acceptable since the argument can always be made to blame someone else. Source monitoring needs to be applied to this situation so that it can be determined if the Company is, or is not operating in an environmentally responsible way. Full-time web-cam monitoring with results on a public website is a further way to demonstrate a good operation. The Waste Management Permit needs to contain clauses that will hold the company to task if it is shown to be polluting. (This applies to effluent also).	An air quality management plan (draft Application Information Requirements [AIR] section 13.0) including mitigation measures will be developed. Dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft AIR section 4.1). Water will be the primary dust suppressant used at the minesite. Baseline monitoring has been conducted to assess air quality based on existing activities. Monitoring during operations will be conducted. Government has enforcement through administrative penalties regulations https://www.bclaws.ca/civix/document/id/complete/statreg/47_2017 Water quality and quantity (draft AIR sections 4.3 and 4.4) and physical interactions with fish habitat (draft AIR section 4.6) are key elements of the aquatic effects assessment that will be conducted in support of TCL's Environmental Assessment (EA) Application. The concerns raised are specifically addressed in aquatic modeling. Water quantity and quality are being evaluated with respect to the projected conditions, and will consider a range of potential outcomes and water management strategies. Locations along the project area creeks and rivers are being modeled. Discharge locations

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IR-01-151	Anonymous, Smithers	(2/2) 2. Water Quality What is the effect going to be on the water quality of the Telkwa River? This should be known and solutions (if required) determined before the operation starts. Pilot studies should be done by an independent consultant (i.e. one that is not answerable to the proponent- this is a serious problem with the environmental review process.) What are the plans to remove dissolved metals before discharging to the environment? Treatement with lime is likely the only practical method. A secondary problem is the resultant hydroxide sludge resulting from the lime treatment. If this material is left in a tailings / settlement pond the result is a dead body of water. Therefore the wastewater containing dissolved metals should be treated in a wastewater treatment plant and the resultant hyrdoxide sludge de-watered and disposed of in a safe manner (e.g. to the area where the coal was removed and then capped.) Water volumes need to be determined and the whole system operated in such a way as to not reduce the flow rate of the Telkwa River (Salmon habitat). 3. Wildlife How can you justify the distruction of Caribou habitat when the survival of Telkwa herd is in a very sensitive situation before the development of the mine? 4. Closure What will the be done to the tailings pond on closure to ensure healthy biotic life in the pit and any water body with tailings/sludge in it? Again I don't see an answer to this problem, and because I personally don't have an answer it doesn't mean that there isn't a problem. Thank you for the opportunity to comment.	and timing will be subject to government requirements. Guidelines are scientifically-based, calculated values, intended to protect aquatic communities. When values are higher than (exceed) a generic guideline, this does not necessarily mean there is an unacceptable risk to the environment. Rather, exceeding a guideline indicates that there is a need for additional site-specific assessments determine the potential for environmental risk, which can then be mitigated or managed. We are following the environmental assessment process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. Federal and provincial caribou biologists are part of the EAO Working Group. The BC *Professional Governance Act* ensures that professionals in the various associations (College of Applied Biology [CAB], Association of Professional Engineers and Geoscientists BC [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines. The assessment on caribou (draft AIR section 4.8) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within the scope of authority of TCL, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd.

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IR-01-152	Jim Culp, Terrace BC	The push to develop this coal deposit seems to never end. Our family moved to Terrace in 1974 and since that time there has been an effort by someone, a corporation or by Government to develop this coal deposit. It is not right or acceptable for this to happen over and over against the will of the majority of the people who live in the Bulkley Valley. It will contribute to climate change regardless how the proponent or our Provincial Government wants to define the development all because of the income it will generate and jobs it will create for the Province. The domination of the all mighty dollar and the economy as usual take center stage. What truly is a world class, (not some fancy full catch all phrase) the Bulkley-Morice River salmonid fishery is the largest producer of wild steelhead in all of BC and most years the sees the most extensive return of chinook salmon to its waters of any tributary river in the Skeena Watershed. This magnificent fishery along with other salmon and char species will be threatened by acid generating rock and waste from the mine for the duration of the project and for many years to follow. To even consider imposing a potential impact of this magnitude upon the fishery, tourism and a way of life upon the citizens of two valleys is heresy. It is time for the BC Government to say no to this project proposal and emphasize to the proponent and to all of British Columbia that the existing way of life by all of its citizens and the tourism economy must not be put at risk by a short term economic gain. Jim Culp	Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are following the environmental assessment process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board address the technical aspects of the Project. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, economics (tourism), land use, human health, Wet'suwet'en Rights and Interests, and managements plan chapters of TCL's EA Application (draft AIR sections 4.3 to 4.8, 5.2, 6.4, 8.0, 11.0, and 13.0).

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IR-01-153	Anonymous, Smithers, BC	Telkwa Coal Proposal:- I am concerned that the Telkwa coal mine proposal is not going through the new environmental assessment process for B.C., and I can only urge that this is reviewed. With the company opting to remain with the old assessment process, I must consider they are not prepared to be fully open and transparent concerning the dangers of mining in this region. Having spent many hours hiking, biking,hunting and fishing in this area I know the impact on wildlife will be high, to say nothing of the watershed. With the drainage into the creeks and and rivers it will be another blow to the already overstressed Bulkley . Air pollution from dust might be mitigated but not eliminated. Air quality is already a problem in our valley. There will be noise pollution for Telkwa residents, which again will impact wildlife perhaps especially the protected caribou habitat close by. In this time of covid we have discovered worldwide that there has been a lessening in air and water pollution, especially in countries which burn coal. This is evidence not to be ignored. It has just been announced that tourism in B.C. has been severely impacted by covid 19. As we move into recovery there will be a huge drive to revive this lucrative and important industry. Our valley and this region is already feeling the effects of hunting restrictions and fishing closures on our economy, an open pit calming will do nothing to attract tourists, but rather to the contrary. I trust these comments will be taken into consideration during the environmental process.	Our project has been under the 2002 *Environmental Assessment* (EA) *Act* since November 2018. The new EA Act came into force, with regulations, in December 2019, more than a year after our work with the Environmental Assessment Office (EAO) began. While we have elected to continue with the original process, our approach has always been to strive to exceed public consultation requirements. As an example, we have already held more open houses than what is required. Through that early public engagement, we have made material changes to our project in direct response to the local community, such as building a Bypass Road. We will continue to strive to exceed the public consultation requirements - even for the new EA Act. Results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines for assessment (draft Application Information Requirements [AIR] sections 8.1, 4.8, 4.2, 4.7). Water quality and quantity and physical interactions with fish habitat are key elements of the aquatic effects assessment that will be conducted. The concerns raised are specifically addressed in aquatic modeling. Tourism will be considered in economic development (draft AIR section 5.2). Federal and provincial caribou biologists are part of the EAO Working Group. The Project is undergoing a full regulatory review through the BC Environment Assessment Act, the BC Mines Act and the BC Environmental Management Act. We are committed to meeting the regulatory requirements to operate in a safe and environmentally responsible manner.
IR-01-154	Friends of Morice Bulkley, Smithers BC	Document Attached: FOMB Comment dAIR tenas Coal 23Jul20.docx	See separate response memo to Friends of Morice Bulkley available on ePIC.

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IR-01-154-a	Friends of Morice Bulkley, Smithers BC	Environment Pillar- VC Fish and fish habitat: According to the BC Environmental Assessment Office guidance document, appropriate Valued Components (VCs) should be those aspects of the natural and human environment that are of greatest importance to society. We believe the most important environmental aspect for the Tenas coal mine proposal is water quality and quantity of both surface water and groundwater. The choice of fish and fish habitat as one of four environmental VCs, with surface and ground water labeled intermediate components, does not represent the reality of this mine proposal. It is true that wild salmon are of societal concern. However, salmon are not particularly useful as a metric because of their anadromous lifecycle (spending much of their life at sea). The sampling, identifying and statistical analysis of fish habitat metrics (usually periphyton and IBI) require months to complete and are open to interpretation as opposed to water quality/quantity metrics. The fact that our towns, rural residences, and farms are in a watershed that has safe drinking source water, recreational and agricultural water is highly valued in our society.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Surface and groundwater will be assessed in TCL's Environmental Assessment (EA) Application. These assessments will be inputs to the fish and fish habitat and human health chapters. In other words, water quality is evaluated based on guidelines derived from biological endpoints in toxicity data (e.g. effects to fish or humans).
IR-01-154-b	Friends of Morice Bulkley, Smithers BC	The guidance document states that the use of VCs focuses analysis on key project-environment interactions. The Tenas Coal dAIR proposes submerging potentially acid-generating (PAG) waste rock and tailings under water in large constructed ponds. The proponent has not provided a Water Balance estimate that validates the effectiveness of this mine plan. Nor have they accounted for faults and fractures reported by previous owners, which would reduce or preclude flooding of the proposed ponds. They have not considered predicted climate change variables, resulting in low summer streamflow or heavy fall-winter rain events. In short**,** water management appears to be a key project-environment interaction for the Tenas Project. VC's should focus the assessment on those interactions of greatest consequence. In the case of an acid-generating mine, such as this, high concentrations of acids and metals have long been known to have significant negative consequence in the aquatic environment. Water quality and quantity are the long-established metrics used for mine approvals, permitting and long-term monitoring.	The draft Application Information Requirements (AIR) is the Environmental Assessment (EA) Application checklist, not the actual EA Application. The information sought will be in the EA Application and are detailed by the provincial government in its requirements for proponents and referenced in the draft AIR. The draft AIR sections 4.0 to 14.0 provide direction on the topics to be addressed in TCL's EA Application, including direction for surface water in section 4.3. Potentially Acid Generating (PAG) material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and limit acid production. Hydrogeological, hydrological and mass transport models are being developed. These models will consider mass loadings from rock placed in the management ponds and will be used to evaluate the modelled change to water quantity and quality in downstream receptors. A site-water balance will be provided in TCL's EA Application. The models will predict changes to quantity and quality for a range of climatic scenarios (e.g., low flow and high flow) to bracket the range of prediction concentrations at downstream receptors. The model results will be inputs to the human health and aquatic life assessments (draft AIR sections 8.1 and 4.5).

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IR-01-154-c	Friends of Morice Bulkley, Smithers BC	Water Quality Objectives have long been established for the Bulkley watershed. In BC, Water Quality Guidelines for acidity and individual metals have also been established, based on decades of laboratory and in-situ experimentation. How will permitting agencies be able to establish end-of-pipe mine effluent discharge limits without adequate water quality data?	(1/2) As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, if modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board address the technical aspects of the Project.
IR-01-154-c	Friends of Morice Bulkley, Smithers BC		(2/2) Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* . New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC MOE, 2016) sampling for both monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012). We have collected aquatic resources (i.e., biota) samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC MOE recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016).

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IR-01-154-d	Friends of Morice Bulkley, Smithers BC	Environment Pillar – VCs Vegetation, Wildlife and Avian Species: The guidance document states that the use of VCs facilitates the selection of study methods and focuses analysis on key project-environment interactions. For this reason, we also question the placement of the endangered Telkwa Caribou herd as a subcomponent equally weighted with common wildlife such as the Marten and Moose. The proposed project lies within the Wildlife Habitat Area designated for recovery of the Telkwa Caribou herd, which is of great conservation concern. We suggest that all Listed and Rare wildlife, plant communities, culturally important plants and listed bird species should be elevated to Valued Components.	As directed by the BC Environmental Assessment Office (EAO) guidance (EAO 2013), Subcomponents (SCs) are identified within Valued Components (VCs) in order to aid the assessment. Caribou is listed as a specific SC under the Wildlife VC. Species at risk include bird (section 4.9), wildlife (section 4.8), and plant (section 4.7) communities in addition to culturally important plants as SCs. Potential effects will be characterized directly at the SC level, therefore there is no benefit to assigning these components as VCs versus SCs.
IR-01-154-e	Friends of Morice Bulkley, Smithers BC	**Social Pillar – VC Community Well-being:** We point out that community well-being is reliant on having safe drinking water, safe recreational waters and safe irrigation and stock water. If the Tenas Project were to proceed without adequate acid mine drainage prevention and/or treatment, downstream water quality will be negatively affected for generations.	We recognize that safe water for drinking, agriculture, and recreation is important for the health and well-being of local residents, livestock, and wildlife. As outlined in sections 4.3, 6.5, and 8.1 of the draft Application Information Requirements, TCL's Environmental Assessment (EA) Application will assess potential effects on water quality as a potential pathway for effects on human and animal health, and community well-being.
IR-01-154-f	Friends of Morice Bulkley, Smithers BC	**Health Pillar – VC Human Health:** As above, human health is reliant on having safe drinking water, safe recreational waters and safe irrigation and stock water. If the Tenas Project were to proceed without adequate acid mine drainage prevention and/or treatment, downstream water quality will be negatively affected for generations.	As part of TCL's Environmental Assessment (EA) Application, potential effects on human health will be assessed (as described in section 8 of the draft Application Information Requirements). The human health effects assessment will include consideration of potential changes in the quality of air, surface water, soil, vegetation/berries, and subsistence foods. A water quality model will be developed, and the results will be incorporated into the human health effects assessment.

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IR-01-154-g	Friends of Morice Bulkley, Smithers BC	The draft AIR for the Tenas Coal Project is unlike any other we have seen because it is vague, disorganized and does not clearly outline the necessary information requirements expected in an environmental assessment. Following are some examples: Figure 1: The only mine layout plan in the dAIR, May 2020, depicts three 'Ponds', apparently dammed by 'Rock Piles'. The Public Open House presentation June 23, 2020 included a mine layout map depicting four much larger 'Water Management Ponds' with no indication of the size or composition of the dams supporting these ponds. Figures 2 is not legible. Figure 9 are not legible, and the legend has text running off the page. Corrected versions are requested. There are track changes and errors in the document. The variation of blue and black writing throughout the document is distracting. It is not clear what the blue/black writing means.	The Application Information Requirements (AIR) is a template document provided by the Environmental Assessment Office (EAO) to proponents. Black font denotes stock language provided by EAO. Per EAO instructions, blue font is proponent information specific to the project. These instructions are indicated on page 2 of the EAO template guide. The strike throughs are not tracked changes, there are the places where we feel the EAO template language could be improved or streamlined. In our final version of the AIR, we have instructions from EAO to use only black font. Issues with map legibility were caused by PDF printing error and will be corrected in the final AIR document. Detailed mine maps will be provided in TCL's Environmental Assessment (EA) Application.
IR-01-154-h	Friends of Morice Bulkley, Smithers BC		(1/3) Subaqueous storage of Potentially Acid Generating (PAG) material limits Acid Rock Drainage (ARD) and metal leaching by preventing sulphide oxidation, and is an effective mitigation strategy for Metal Leaching (ML)/ARD as per the Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia (EMPR 1998). The geochemistry studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) has been followed for these studies and used to develop an understanding of where the PAG rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials. The mine will be operated according to the metal leaching/acid rock drainage (ML/ARD) Management Plan (draft Application Information Requirements [AIR] section 13.0) currently being prepared as part of the application. References can be found in section 4.3.2 of the draft AIR. A geochemistry baseline report will also be submitted with TCL's Environmental Assessment (EA) Application that specifies the characterization methods and geochemical testing results.

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IR-01-154-h	Friends of Morice Bulkley, Smithers BC	It is not apparent from the dAIR that the proponent has evaluated the adequacy of their plan to use subaqueous storage of PAG materials in order to prevent the formation of Acid Mine Drainage (AMD) and associated metals leachate. Despite this, the proposal describes limited treatment of mine waters prior to discharge to the Telkwa River (rather than to smaller closer watercourses, such as Goathorn, Tenas or Four Creeks). A larger receiving water should not be chosen to avoid using the best available treatment technologies. Further, the Telkwa River already has levels of cadmium, zinc and lead above BC Water Quality Guidelines (BC WQGs). Further exceedances of WQGs in the Telkwa River will potentially have deleterious effect on fish and aquatic life.	(2/3) As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, if modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. We are following the environmental assessment process as established by the BC Environmental Assessment Office. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board address the technical aspects of the Project. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .
IR-01-154-h	Friends of Morice Bulkley, Smithers BC		(3/3) New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC MOE, 2016) sampling for both monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012). We have collected aquatic resources (i.e., biota) samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC MOE recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016).

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IR-01-154-i	Friends of Morice Bulkley, Smithers BC	Our question is, should a proponent be entering the BC EA process without presenting a plan for managing PAG waste rock and AMD discharge that has been vetted by licenced professional geologists, engineers, and biologists? The proponent is apparently uncertain of how the BC Environmental Assessment processes are conducted or what the public expects in environmental protection. This is especially apparent in the lack of recognition that water quality and quantity are shared public resources and therefore the public expects to be at the table during every step of the mine approval and permitting process.	We are following the environmental assessment (EA) process including, public consultation, as led by the BC Environmental Assessment Office (EAO). This pre-application phase consultation is the first of three public comment periods led by EAO. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. The draft AIR includes evaluation of metal leaching and acid rock drainage and its influence on water quality (draft AIR section 4.3) and a Metal Leaching/Acid Rock Drainage management plan (dAIR section 13.0). The assessments and plans will be prepared by registered professional geoscientists. The BC *Professional Governance Act* ensures that professionals in the various associations (College of Applied Biology [CAB], Association of Professional Engineers and Geoscientists BC [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines. The actual assessments are submitted with the TCL's EA Application during the next review phase of the EA process. There will be an additional two public comment periods in the review phase. In addition, the community is represented by the public servants and by local government officials on the EAO working group.
IR-01-154-j	Friends of Morice Bulkley, Smithers BC	Based on the draft AIR (page 15), is the project proceeding with concurrent permitting during the EA review? If so, could our group view the draft Information Requirements Table for the permitting process and provide comment? If concurrent permitting is to proceed, could the scope of the concurrent permitting please be defined?	The draft Information Requirements Table (IRT) is currently in development. The permitting process is administered by the Major Mines Permitting Office.
IR-01-154-k	Friends of Morice Bulkley, Smithers BC	Overall the draft AIR appears to be a preliminary document. An additional public review period is requested following the submission of a revised, legible, and complete document with clear figures and clarity on the expectations for AIR. This project is of significant public concern and draft AIR for public review should contain sufficient information that a meaningful public review is possible.	The draft Application Information Requirements (AIR) is a checklist of information required for TCL's Environmental Assessment (EA) Application. Much of the content of the draft AIR was reviewed between January and September 2019 by the Environmental Assessment Office (EAO) Working Group in the Valued Components (VC) Selection Document (see EPIC post). The draft AIR was drafted based on EAO Working Group technical input on the VC document. The EAO Working Group has provided comments to this draft AIR and we have made adjustments in response. Based on public feedback received during the comment period, we will consider revisions to the draft AIR. This comment period was focused on the draft AIR and is the first of three public comment opportunities. The next opportunity for public input will occur during the Review Phase, after TCL's EA Application has been submitted and accepted by the EAO for review. The third comment period will be after the EAO releases their draft Assessment Report.

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IR-01-154-l	Friends of Morice Bulkley, Smithers BC	Local community groups have a big stake and real concerns with the proposed project. Groups such as ourselves, Northwest Institute, and What Matters in Our Valley have technical members and contracted technical experts to assist with the review and can assist with the screening and detailed review during the EA. We request that local group members and technical consultants be included in the Working Group for the EA review of the Tenas Coal Project.	The Environmental Assessment Office (EAO) is responsible for choosing the participants of the Working Group. We are following the environmental assessment (EA) process as established by the BC EAO. Technical Working Groups are required as part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board address the technical aspects of the Project. This comment period was focused on the draft Application Information Requirements (AIR) and is the first of three public comment opportunities. The next opportunity for public input will occur during the Review Phase, after TCL's Environmental Assessment (EA) Application has been submitted and accepted by the EAO for review. The third comment period will be after the EAO releases their draft Assessment Report.
IR-01-155-a	Tina Portman, Smithers, BC	(1/2) Telkwa Coal Draft Assessment Information Requirements (dAIR) Issues I fully support all of the following recommendations. Tina Portman Smithers, BC 1. Size Matters When Telkwa Coal first proposed this project, it stated that its plan was to develop an open-pit coal mine producing 240,000 tonnes of coal per annum (tcpa) of product. This production level happened to be just under the then existing Provincial Environmental Assessment threshold of 250,000 tcpa. WMIOV and others complained to the Ministry about what seemed to be a transparent attempt to get around the EA process. Telkwa Coal then revised its proposal and submitted a draft mine plan identifying the mine project’s objective to be 750,000 tcpa.	

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IR-01-155-a	Tina Portman, Smithers, BC	(2/2) However, since then, in its public statements to the business community contained in its Corporate Reports, Telkwa Coal has repeatedly stated that its true objective is to “ramp up” to 1.35 million tonnes per year. (See, e.g. Allegiance Coal (Telkwa Coal’s Corporate parent) Corporate Presentation, May 2020, p. 8.) Despite this, the Environmental Assessment office continues to review this proposal as if it were for a mine producing at the 750,000 tcpa level. So which is it? If 1.35 million tonnes, it simply does not make sense for the Environmental Assessment to take place based on misinformation about the scope of the project. Size matters because it affects all of the potential environmental and social impacts. Just as one example, while Telkwa Coal currently describes its proposed water usage for cleaning coal as 15,000 litres per hour, under the 1.35 million tonne scenario, usage would have to be almost twice that. What effect will this have on toxins, water runoff, water sources, capacity to control acid rock drainage (ARD) and cumulative effects? RECOMMENDATION: That the EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.
IR-01-155-b	Tina Portman, Smithers, BC	(1/2) 2. Water and Fish Water - The dAIR relies on what are known as Valued Components (VC). These are the attributes and potential areas of concern that are most important in judging the mine proposal’s merits. Surprisingly, Water is not identified in the dAIR as one of the Valued Components. Instead, it is considered an Intermediate Component (IC). ICs can be ignored in the final analysis, as long as the VCs they are related to (in this case fish) are sufficiently protected or, even if there are ill effects, those effects can be adequately mitigated. In other words, as long as there are not unacceptable risks to the fish or if mitigation is possible, then protecting water will not be a priority under the current dAIR. Water has both high societal value and high ecological value and therefore should be selected as a Valued Component as part of this Environmental Assessment, and not just as an Intermediate Component. Our rivers and our water quality are of immense historical and cultural importance to the people of the Bulkley/Wetzinkwa Valley. The attempt to diminish that importance in the review of this project is frankly surprising, especially given the quite serious risks the project poses to these treasured parts of our heritage.	In response to feedback from the Office of the Wet’suwet’en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources,

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IR-01-155-b	Tina Portman, Smithers, BC	(2/2) Fish – The boundaries for review under the dAIR are limited to the Telkwa and a short stretch of the Bulkley just down stream from the confluence. Given the importance of the rivers and the fish, as well as the significant threats that already exist to fish survival, this seems quite inadequate. In addition, while the dAIR refers to relying on current science-based thresholds for contaminants that pose a risk to fish, those thresholds may not be sufficient to actually protect fish stocks. Our fish runs are already imperilled. Levels of heavy metals in the Telkwa are already significant. We suggest that the impact assessment include a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed. RECOMMENDATIONS: • That Water be treated as a Valued Component in the dAIR. • That the boundaries set for analysis of adverse effects include the entire Skeena system. • That the precautionary principle be applied due to the pre-existing threats to fish survival. • That the AIR call for a review of the latest scientific literature and analysis to help determine appropriate thresholds for fish toxicity, including sub-lethal effects.	fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) Project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .
IR-01-155-c	Tina Portman, Smithers, BC	3. Water Usage - Rivers, Creeks and Underground Sources A coal mine of this nature requires the use of large volumes of water for washing the product (as noted above, according to Telkwa Coal 15,000 litres per hour at the 750,000 tonne per year production rate). The washing of the coal will take place alongside the mine site. Telkwa Coal claims that it hopes to obtain enough water from the neighbouring creeks, runoff and underground sources to meet its needs in this regard. If not, it will draw from other sources in the Regional District. We assume this means the Telkwa River because what other nearby sources are there? Neighbours are also concerned that the use of underground sources will deplete the wells they rely on for their household water supply. RECOMMENDATION: The AIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa Coal provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	The draft Application Information Requirements (AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As identified in the draft AIR sections 4.3 and 4.4, surface water and groundwater are components of TCL's EA Application with their subcomponents of quantity and quality. As well, fish and fish habitat are included as components in TCL's EA Application (draft AIR section 4.6). These chapters will be presented in TCL's EA Application, along with a water balance. The water balance model will consider climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses have been included to further strengthen the positive water balance for the water covers.

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IR-01-155-d	Tina Portman, Smithers, BC	(1/2) 4. Acid Rock Drainage and Metal Leaching a. Tailings Impoundment - Separation of Materials Telkwa Coal acknowledges that its operations will produce significant quantities of Potential Acid Generating (PAG) materials. PAG results in Acid Rock Drainage if exposed to the elements. There is also a substantial risk of leaching of heavy metals. Heavy metals are highly toxic to fish. To prevent ARD, Telkwa Coal must separate PAG from non- PAG and then remove the PAG from contact with the environment forever. Telkwa Coal's current plan is to create a containment pond or ponds alongside the mine and place the PAG material and other toxic sources into this containment area and cover it with water. The resulting tailings impoundment(s) will cover an area about 1/2 the size of Tyhee Lake and about 40 metres deep. To carry out this plan, Telkwa Coal must separate the PAG material and the non-PAG material. The PAG material would then be submerged in the containment areas and the non-PAG material would be piled alongside the mine pit and impoundment areas.	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's Environmental Assessment (EA) Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of the application. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-155-d	Tina Portman, Smithers, BC	(2/2) However, according to one of the reviewers during the similar Manalta project in the mid-1990's, it is highly unlikely that such a separation process could work. Even if the separation could occur, it would take a considerable amount of time for this to take place. What happens to the acid generating material in the meantime since, as soon as the material is exposed to the environment it starts acidifying and, thus, creating polluted runoff? b. Tailings Impoundment - Containment Plan Once the Acid Rock generating material is submerged in a containment lake, it must be preserved there forever. Reviewers during the Manalta process thought that, given the topography and underlying geology of the area, including the faults and fractures that exist there, it is unlikely that the impoundment would successfully retain the ARD material and/or heavy metals. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	

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IR-01-155-e	Tina Portman, Smithers, BC	(1/3) 5. Water Treatment - Heavy Metals and other Toxins The mine area contains heavy metals which are toxic to fish. In addition to Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc, there is an open question about the amount of selenium that will be produced. During the Manalta process, the reviewers concluded that the amount of selenium would be below Provincial threshold levels. However, since that time, the thresholds have been lowered due to findings about fish toxicity. a. Removal of heavy metals and other toxins The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the Province. We know from the experience at the Teck mines in the Elk Valley that even the most advanced and expensive technology for removing selenium does not work. Telkwa Coal proposes to treat water runoff from its operations by cleaning it to a point where it supposedly does not pose a risk to the river and the fish and then to pipe it to the Telkwa River for discharge. Will it be possible to successfully treat and clean the runoff?	The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project. Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements. As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the
IR-01-155-e	Tina Portman, Smithers, BC	(2/3) b. Discharge to Telkwa River Even if Telkwa Coal could successfully clean the runoff, how will dumping it into the Telkwa affect water temperature, water flow and other factors critical to water quality and the fish? The proposed project would discharge mine impacted water directly to the Telkwa River. Sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these metals would cause further exceedance of BC WQGs in the Telkwa and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water. c. Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved materials that are present. There are many industrially proven methods for treating mine contact water of this nature to remove dissolved species.	

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IR-01-155-e	Tina Portman, Smithers, BC	(3/3) RECOMMENDATIONS: • Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. • Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. • Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .
IR-01-155-f	Tina Portman, Smithers, BC	6. Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this may be relevant for the Tenas project is in PAG material handling. Pit capacity must be available at the same time as PAG material is generated in order to avoid temporary surface storage. RECOMMENDATION: That Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan included in TCL's Environmental Assessment Application. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.

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IR-01-155-g	Tina Portman, Smithers, BC	7. Caribou The Telkwa Caribou herd is listed under the Species at Risk Act and is identified as at threat of imminent extirpation. The herd is currently at approximately 34 animals. To prevent extinction of the herd, a Wildlife Management Area was recently created in the Telkwa Mountains. The long term goal is to restore a mature forest with limited disturbances in the form of logging, road building and further habitat destruction. The Telkwa Coal Mine location is almost completely within the Telkwa Caribou Wildlife Management Area. It will result in a removal of a substantial area of re-growing forest and create a haul road that will cross a part of the recovery zone. Coal hauling trucks will pass along this road somewhere between every 5 and 10 minutes. The establishment of the mine is inconsistent with the Caribou recovery plan and will prevent the return of undisturbed mature forests in the area. As a consequence, it will put further pressure on a herd that is already on the brink just as it starts to recover. RECOMMENDATION: That the AIR should require an assessment of the likely impact on the success of the Caribou recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-155-h	Tina Portman, Smithers, BC	8. GHG Emissions – Full cycle including methane and alternatives While Telkwa Coal identifies this project as intended to produce coal for steelmaking (metallurgical coal) and not for energy production (thermal coal), this does not resolve the question of its effect on greenhouse gas emissions. 90% of the CO2 contained in metallurgical coal is released during the steel making process. Steel making itself is responsible for somewhere between 5 and 10% of total greenhouse gas emissions worldwide. Meanwhile, the world is moving away from using coal for steel production and ghg free methods are starting to be implemented. Also, because the coal seam in Telkwa is associated with coalbed methane, there is a possibility of substantial methane releases during the mining of the coal. In order to determine the total greenhouse gas impact of this project, the dAIR should require a full review of all releases throughout all stages of development, production, transportation and use. RECOMMENDATION: That the AIR require sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also requires information as to whether there are alternatives to using coal in steelmaking that will produces less harmful effect on the environment	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.

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IR-01-155-i	Tina Portman, Smithers, BC	9. Air – Dust So far, air quality issues have not been addressed in any significant way. As news from Sparwood, B.C. establishes, running a coal mine can produce a significant amount of coal dust: http://www.cbc.ca/news/canada/british-columbia/sparwood-teck-coal-mine-1.4696904 https://www.thefreepress.ca/news/teck-to-compensate-sparwood-residents-for-dust/ Sources include blasting, as well as dust blown off waste piles and trucks and while loading and operating railroad cars. So far, we have not heard any significant discussion about how the dust would be controlled at the Telkwa mine site itself. In regards to transportation from the mine to the loadout by truck and from the loadout to the port by train, Telkwa Coal has referred to covering the product with some form of latex material, but there are no details. Even with such a system, coal dust from rail cars can still be a problem: https://www.columbiavalleypioneer.com/news/coal-dust-escaping-rail-cars-spurs-b-c-petition/ The Bulkley Valley already suffers from poor air quality. Our average PM <2.5 levels almost always exceed the annual Provincial targets. PM >10 is also a problem, mostly from road dust in the spring. How will the blasting, processing, transportation and storage of the coal impact our air quality, especially given that the mine site is generally upwind from Telkwa and Smithers? RECOMMENDATION: That Air Quality should be treated as a Valued Component and the dAIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, the review should take place with the objective of preventing any further degradation of air quality.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements sections 4.1 and 13.0). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (Pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance.
IR-01-155-j	Tina Portman, Smithers, BC	10. Noise - Amount/Distance Obviously, between blasting and heavy truck traffic, the mine and loading operations will produce a significant amount of noise. So far, it appears that the only studies about how much noise will be produced are based on computer simulations. Together with the environment, the quality of life issues valued most by area residents focus on our quiet rural lifestyle (see Regional District Rural Official Community Plan Survey results, 2012). RECOMMENDATION: That noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed using methods that reasonably reflect real life conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements, these will be covered in sections 4.1, 4.8 and 8.0.

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IR-01-155-k	Tina Portman, Smithers, BC	11. Load Out – Flood Plain/ Haul Road impact According to the Regional District map, the proposed loadout facility site is on a Bulkley River floodplain. From personal experience, we know that this site is subject to flooding from the River. So, the potential is there for flood waters to wash stored coal into the Bulkley. Tenas Coal's plan is to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas Coal intends to store the wash coal on the ground, this land will be polluted for years and the only way to clean it will be to remove the soil. The haul road's planned path crosses the Helps Creek wetlands watershed for 7 km. We think this wetland and creek should be getting the same consideration asTenas, Four and Goathorn Creeks. Our concerns here, in addition to the impact on caribou, are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek. As noted in the Caribou section, the haul road is also directly inconsistent with one of the main objectives of the Caribou	(1/2) As described in the draft Application Information Requirements (draft AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan. Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd.

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IR-01-155-k	Tina Portman, Smithers, BC	also directly inconsistent with one of the main objectives of the Caribou recovery plan, which is to eliminate and not expand linear disturbances and to allow the herd to use the lower elevation forests in an undisturbed fashion. RECOMMENDATION: That the dAIR include a requirement for a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(2/2) The draft AIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the ALR. Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the recovery program. The assessment on caribou (see draft Application Information Requirements [AIR] section 4.8) will include consideration of the existing and historical disturbances mentioned. The assessment will focus on a quantitative, science-based approach using 20 years of telemetry and mortality data from the current population and will assess habitat disturbance, mortality, movement, and sensory disturbance. TCL's EA Application will identify measures to avoid, manage or otherwise mitigate potential adverse effects following the hierarchical procedure of avoid, minimize, restore, and offset, among other best practices. Although implementation of the Recovery Program is outside the scope of this Project, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.
IR-01-155-l	Tina Portman, Smithers, BC	12. Recreation/Life Style impact Recreation is mentioned under the VC for land and resources. Outdoors recreation is one of the main features of the quality of life which Bulkley Valley residents value. The Hunters Basin/Hankin Plateau area is important to horseback riding and hiking enthusiasts. The mine site sits on top of the only access road into these areas. Will access be protected? RECOMMENDATION: That the dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a subcomponent (SC) under the Land and Resource Use Valued Component (VC) (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in Infrastructure and Services (draft AIR section 6.3). The application of mitigation measures to avoid adverse effects is part of the environmental assessment (EA) process, and will be considered accordingly in TCL's EA Application, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of the EA Application. In advance of the EA Application, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in TCL's EA Application subject to government requirements (draft AIR section 13.0).

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IR-01-155-m	Tina Portman, Smithers, BC	13. Telkwa Coal Ltd. Finances and Bond Allegiance Coal, the company behind the Tenas Project, is a thinly capitalized Australian company with a weak financial position. The following information publicly available as of 2020-6-23 shows Allegiance Coal trading at a price of 7 cents per share, and that it has a market capitalization of only 40.28 million ASD, cash on hand of only 1.43 million ASD, with a debt of 2.32 million ASD, and a negative cash flow of 1.86 million ASD over the twelve trailing months. It has never operated a coal mine. If there were an accident or malfunction at the mine, or if an accidental release from the containment area occurred after the mine entered its reclamation and post-closure phase, then a reasonable question is: what resources are available to minimize the environmental and social impacts of the possibility of the company's inability to pay? RECOMMENDATION: • The AIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. • All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.
IR-01-155-n	Tina Portman, Smithers, BC	14. Jobs and Economic Opportunities The dAIR refers to the jobs that would be created through the coal mine project. However, much of the economic opportunities that have arisen in the Bulkley Valley during the last few years have come from such sources as tourism, recreation, amenity migration, home construction and real estate. All of these sectors depend in whole or in part on the preservation of a lifestyle connected to nature and natural beauty. The introduction of an open pit coal mining operation with its associated noise, dust and effects on the natural world will obviously have some negative effects on these economic sectors. For instance, what impact will it have on property values, air and noise pollution and the fishing based tourism economy? RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft AIR). Similarly, potential air, noise and visual effects on a range of land uses, including, for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR Section 6.4). Property values , housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC.

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IR-01-155-o	Tina Portman, Smithers, BC	15. UNDRIP BC has adopted the principles of the UN Declaration on the Rights of Indigenous People. Those principles are applicable here since the mine site sits on the territory of the Wet'suwet'en people. RECOMMENDATION: All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us.
IR-01-156	Anonymous, Telkwa, BC	I am an indigenous person living in Telkwa. I do not give free, prior and informed consent to the Tenas Coal project in accordance with your requirements under UNDRIP. Allowing a coal mine to open in Telkwa would be a gross violation of the Paris Agreement as it pertains to Canada's international climate obligations. Coal mining should be considered a climate crime which causes ecocide, and jeopardizes the future sustainability of the economy in our region by worsening natural disaster events such as wildfires. Furth more, coal mining destroys the watershed, and poisons the drinking water for everyone down stream. The market for coal is going to be non existent very soon. Opening this coal mine would be a gross violation of local residents human rights. It would be a public nuisance, and it would attract non local workers to the area, which would put more stress on the environment and endanger local women (see the missing and murdered indigenous women inquiry report). We can no longer ignore climate change due to the greed of a few selfish industry moguls. We cannot drink water. Leave Telkwa alone Tenas Coal!	We appreciate your perspective. From the outset, led by our CEO who is Maori, we have been clear in our commitment to have open communication with the Indigenous people. For example, we signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en in early 2017. Our relationship with the Wet'suwet'en and Indigenous peoples are of great importance to us. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us. For further questions about the Environmental Assessment (EA) process, kindly contact the BC Environmental Assessment Office (EAO). The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting the regulatory requirements to operate in a safe and environmentally responsibly manner. As per the draft Application Information Requirements (draft AIR), the inquiries will be addressed in the human health (section 8.0) and socio-economic (sections 5.0 and 6.0), heritage, Rights and Interests (section 7.0 and Part C) and Management Plan (section 13.0) chapters of TCL's Environmental Assessment (EA) Application.
IR-01-157	Mike Buirs Telkwa, BC	I could not attach the file and submit my document so I copied and pasted it here. I also notice that I am unable to make my name public and submit. Mike Buirs Telkwa, BC July 23, 2020 Response to Telkwa Coal Draft Assessment Information Requirements [DAIR] Issues.	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR section 8.1, Human Health will be included in TCL's EA Application.

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IR-01-157-a	Mike Buirs Telkwa, BC	That the EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.
IR-01-157-b	Mike Buirs Telkwa, BC	That Water be treated as a Valued Component in the dAIR. That the boundaries set for analysis of adverse effects include the entire Skeena system. That the precautionary principle be applied due to the pre-existing threats to fish survival. That the AIR call for a review of the latest scientific literature and analysis to help determine appropriate thresholds for fish toxicity, including sub-lethal effects.	(1/2) In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

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IR-01-157-b	Mike Buirs Telkwa, BC		(2/2) The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) Project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the Environmental Management Act.
IR-01-157-c	Mike Buirs Telkwa, BC	The AIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa Coal provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	The draft Application Information Requirements (draft AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The purpose of the draft AIR is to identify the information that is to be included in the TCL's Environmental Assessment (EA) Application. As identified in the draft AIR sections 4.3 and 4.4, surface water and groundwater are components of TCL's Environmental Assessment (EA) Application with their subcomponents of quantity and quality. As well, fish and fish habitat are included as components in TCL's EA Application (draft AIR section 4.6). These chapters will be presented in the TCL's EA Application, along with a water balance. The water balance model will consider climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses have been included to further strengthen the positive water balance for the water covers.

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IR-01-157-d	Mike Buirs Telkwa, BC	The methodology for describing the impact of metal leaching and acid rock drainage must be specified. The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	Per section 4.3.3 of the draft Application Information Requirements (draft AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's Environmental Assessment (EA) Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of the application. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. As part of the Environmental Assessment application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-157-e	Mike Buirs Telkwa, BC	Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a	(1/2) The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project. Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements.

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IR-01-157-e	Mike Buirs Telkwa, BC	location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	(2/2) As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act.*
IR-01-157-f	Mike Buirs Telkwa, BC	That Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.
IR-01-157-g	Mike Buirs Telkwa, BC	That the AIR should require an assessment of the likely impact on the success of the Caribou recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-157-h	Mike Buirs Telkwa, BC	That the AIR require sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also requires information as to whether there are alternatives to using coal in steelmaking that will produces less harmful effect on the environment.	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.
IR-01-157-i	Mike Buirs Telkwa, BC	That Air Quality should be treated as a Valued Component and the dAIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, the review should take place with the objective of preventing any further degradation of air quality.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements sections 4.1 and 13.0). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance. To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only, even if it is a pathway component.

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IR-01-157-j	Mike Buirs Telkwa, BC	That noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed using methods that reasonably reflect real life conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements, these will be covered in sections 4.1, 4.8 and 8.0).
IR-01-157-k	Mike Buirs Telkwa, BC	That the dAIR include a requirement for a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(1/2) As described in the draft Application Information Requirements (draft AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan.
IR-01-157-k	Mike Buirs Telkwa, BC		(2/2) Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd. The dAIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the agricultural land reserve.

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IR-01-157-l	Mike Buirs Telkwa, BC	That the dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a considered as subcomponent under the Land and Resource Use Valued Component (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in infrastructure and services (draft AIR section 6.3). The application of mitigation measures is part of the environmental assessment process, and will be considered accordingly in the assessments, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of TCL's Environmental Assessment (EA) Application. In advance of TCL's EA Application, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in TCL's EA Application subject to government requirements (section 13.0).
IR-01-157-m	Mike Buirs Telkwa, BC	The AIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.
IR-01-157-n	Mike Buirs Telkwa, BC	The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4) . Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (draft AIR section 6.5).

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IR-01-157-o	Mike Buirs Telkwa, BC	All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us.
IR-01-158	Anonymous, Quadra Island	The last thing we need is more investment in a dying industry which we simply cant afford to continue. There is no guarantee it will be used strictly for metalurgical uses, once it leaves our shores.	The product is intended as metallurgical / steelmaking coal for the marketplace to sell at significant premium to thermal coal. While we do not control what happens with the coal after it is purchased, it is unlikely that a buyer would pay significantly more to use coal from the Tenas Project for thermal purposes when there plentiful and lower cost alternatives available.
IR-01-159	Anonymous, Telkwa BC	Document Attached: Public Comment Telkwa Coal July 23rd 2020.pdf	See separate response memo to What Matters in Our Valley available on ePIC.
IR-01-159-a	Anonymous, Telkwa BC	1. UNDRIP BC has adopted the principles of the UN Declaration on the Rights of Indigenous People. Those principles are applicable here since the mine site sits on the territory of the Wet'suwet'en people. BC is taking steps to ensure that new projects proceed through the EA with consent. RECOMMENDATION: All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People but also demonstrate the provinces commitment to a joint environmental assessment decision that not only recognizes the traditional territory but is a true joint decision with indigenous and provincial representation.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us.

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IR-01-159-b	Anonymous, Telkwa BC	2. Recreation/Life Style impact Recreation is mentioned under the VC for land and resources. Outdoors recreation is one of the main features of the quality of life which Bulkley Valley residents' value. The Hunters Basin/Hankin Plateau area is important to horseback riding and hiking enthusiasts. The mine site sits on top of the only access road into these areas. Access needs to be maintained and improved. RECOMMENDATION: • The process ask the company how they will demonstrate and improve recreational access to the Telkwas when the area is open to the public for recreation. • The dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a considered as subcomponent under the Land and Resource Use Valued Component (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in infrastructure and services (draft AIR section 6.3). The application of mitigation measures is part of the environmental assessment process, and will be considered accordingly in TCL's Environmental Assessment (EA) Application, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of TCL's EA Application. In advance of the EA Application, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in the EA subject to government requirements (section 13.0).
IR-01-159-c	Anonymous, Telkwa BC	(1/2) 3. Size Matters - Should be reviewed at 1.35 Million tonnes per year When Telkwa Coal first proposed this project, it stated that its plan was to develop an open-pit coal mine producing 240,000 tonnes of coal per annum (tcpa) of product. This production level happened to be just under the then existing Provincial Environmental Assessment threshold of 250,000 tcpa. WMIOV and others in the Valley complained to the relevant Ministry that this description seemed to be a transparent attempt to escape review under the Environmental Assessment Act. As a result, we asked the Minister to exercise his discretion to order an Environmental Assessment notwithstanding the stated size of the project in view of the highly sensitive nature of the proposed mine site as it sits adjacent to the Telkwa River. The Telkwa River is a major tributary to the Bulkley/Wetzinkwa River and the entire Skeena system, as well as an important salmon bearing stream in its own right. Consequently, the mine proposal poses risks to the entire Skeena system and the salmon runs that depend on it. We understand that this request was receiving favourable consideration.	

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IR-01-159-c	Anonymous, Telkwa BC	(2/2) So, Telkwa Coal then abandoned its initial position and filed its first formal Project Description identifying its objective to be a mine producing 750,000 tcpa. However, in its public statements to the business community contained in its Corporate Reports, Telkwa Coal has repeatedly stated that its true objective is to “ramp up” to 1.35 million tonnes per year. (See, e.g. Allegiance Coal (Telkwa Coal’s Corporate parent) Corporate Presentation, May 2020, p. 8.) Despite this, the Environmental Assessment office continues to review this proposal as if it were for a mine producing at the 750,000 tcpa level. So which is it? If 1.35 million tonnes, it simply does not make sense for the Environmental Assessment to take place based on misinformation about the scope of the project. Size matters because it affects all of the potential environmental and social impacts. Just as one example, while Telkwa Coal currently describes its proposed water usage for cleaning coal as 15,000 litres per hour, under the 1.35 million tonne scenario, usage would have to be almost twice that. What effect will this have on toxins, water runoff, water sources, capacity to control ARD and cumulative effects? Water quality and water demand from all sources l (See water section below), as well the prospects for successful containment of ARD and heavy metal leaching form some of the main challenges for this project. A meaningful review requires that the true size of the project be taken into account. RECOMMENDATION: The EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.

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IR-01-159-d	Anonymous, Telkwa BC	(1/7) 4. Water as Valued Component WMIOV has reviewed the draft Application Information Requirements (dAIR) and four components of water (surface water quantity, surface water quality, ground water quantity, ground water quality) have been selected as Intermediate Components (IC), rather than Valued Components (VC). We disagree.We contend that water has both high societal value and high ecological value and therefore should be selected as Valued Components, as part of this Environmental Assessment, and not just as an Intermediate Component. Reason One: The dAIR focuses the EA Conclusions on Valued Components when environmental assessments are undertaken. It is our view that Valued Components are the ultimate guide for the assessment AND management of "What Matters" with respect to the impacts and effects of a project. This is evident in this dAIR in Part F, Section 15.0 Conclusions, which states that the application will, "Provide the Proponent's conclusions regarding the potential for significant adverse effects on the VC's from the Project." And in, Part F, 15.1 Summary of Residual Effects states, The Application will summarize all potential residual effects, including cumulative residual effects, in a table format that depicts the potential effect, project phases, project activity or physical work linked to the effect, proposed mitigation and significance of effect on VCs.	

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IR-01-159-d	Anonymous, Telkwa BC	(2/7) Furthermore, on page 21 of the dAIR it is stated, Because an assessment is completed for a VC, the receptor for the effects, an assessment of an IC is not completed to avoid redundancy in the assessments. So, if Water is not treated as a VC standing on its own, any deleterious effects that do not impact VCs will not receive any attention. Consequently, there is no inclusion of Intermediate Components in the Conclusions. Water needs to be fully addressed in the Review and not treated as less significant component of another value. Reason Two: Water as a Component Meets the EAO Guidelines for Valued Component Selection when a Component is an Effect-Pathway WMIOV reviewed the “Guidelines for the Selection of Valued Components and Assessment of Potential Effects”, Environmental Assessment Office, 2013. (EAO, 2013) In the dAIR, the four components of water have been selected as an Intermediate Component in an “effect pathway”. In our view this is an inappropriate interpretation of the guidelines. For example, water quality is being used to evaluate the effects of the project on Fish and Fish habitat because the four water components are effect pathways on fish habitat and fish. (Table 3: Proposed Valued Components (VC) and Intermediate Components (IC) for the Tenas Project and Selection Rationale, Tenas Project – Final Draft – Valued Component Scoping Document, Sept 2019). And a result, the four water components have not been selected as Valued Components.	

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IR-01-159-d	Anonymous, Telkwa BC	(3/7) In doing so, the dAIR has ignored additional guidelines offered by EAO, 2013. Page 12 of the Guidelines States… However, in some cases, for some kinds of projects, it may be appropriate to select an intermediate component as a stand-alone VC, particularly if there is potential for significant adverse effects on the intermediate component and/or the intermediate component is of particular concern. An intermediate component may also be selected as a VC when the intermediate component is more amenable to measurement and monitoring than the receptor component. WMIOV contends the following to be true: a) there is potential for significant adverse effects on the four components of water; b) water is in of itself of particular concern to many stakeholders, and; c) the components of water are much more amenable to measurement (i.e. fast) and monitoring (i.e. responsive) than receptor components (ex. fish and fish habitat). Therefore, based on a comprehensive reading of the EAO guidelines, the four components of water should be selected as Valued Components.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of

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IR-01-159-d	Anonymous, Telkwa BC	(4/7) Reason Three: The Magnitude of the Effects on Water are Significant. The magnitude of the issues related to water are significant and as result require the full application of rigour and follow through that Valued Component receive. We know from previous assessment work on the site that a major concern is the potential for acid rock drainage and/or metal leaching, the potential effects on the receiving environment and the operator's ability to prevent its occurrence or mitigate its impacts. We also know that water is impacted by natural variations in climatic conditions. Given the possibility of climate variability in the Bulkley/Wetzinkwa Watershed, the historical records for climate variability for the study area will be less reliable and this will introduce more uncertainty. Regarding time scales, the impacts on water and watershed health are significantly different than other components. Impacts and effects on water and watershed health can be impacted in perpetuity from mining projects. One just needs to look upstream in the Bulkley River Watershed to the Equity Mine for an example of the legacy impacts on water. Regarding mitigation remedies (i.e. costs) once something goes wrong, the remediation and mitigation of effects on water and watershed health can be orders of magnitude larger than many other effects from a mining project. If water is not considered a valued component, there will be a gaping hole in the assessment and the conclusions of the EA. Therefore, the EA will be less likely to give the community certainty on this valuable resource.	the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft Application Information Requirements (draft AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would

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IR-01-159-d	Anonymous, Telkwa BC	(5/7) Reason Four: The Devil is in the Details – Let's See the Detailed Design of Project Components in The EA and not the Permitting Stage Page 14, EAO, 2013 states… If an important component of the natural or human environment is expected to be affected by the project but has been excluded as a VC because it is well-protected through other government legal requirements and additional assessment is not considered necessary, the specific legal requirements must be clearly noted in the rationale for exclusion. In the dAIR, Table 3: Proposed Valued Components (VC) and Intermediate Components (IC) for the Tenas Project and Selection Rationale, Tenas Project – Final Draft – Valued Component Scoping Document, Sept 2019) states that the four components of water are protected under additional legislation. - Surface water quantity is protected under the Water Sustainability Act. - Surface water quality is protected under the Environmental Management Act and screened against the BC Approved Water Quality Guidelines. - Groundwater quantity is protected under the BC Water Sustainability Act. Finally, groundwater quality is protected under the BC Environmental Management Act and screened against the BC Contaminated Sites Regulation Groundwater Standards.	not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) Project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .

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IR-01-159-d	Anonymous, Telkwa BC	(6/7) Given the way this information is presented we are apparently supposed to conclude that the selection of the four components of water as Intermediate Components and not Valued Components took place because these components are protected under additional legislation. Given that water has such high societal and ecological values, it would be prudent and wise for the community, the company and investors to figure out if the project activities will have significant impacts on water during the EA process and not wait until the permitting or compliance stages. By selecting the four components of water as Valued Component the assessment would garner more detailed design of the project components. For example, detailed engineering drawings and not just conceptual plans should be required, so that the effects on the four components of water can be more thoroughly assessed and understood before the project approval or denial takes place. This would give greater confidence in the EA certificate, if granted. This more detailed design and assessment could then be utilized in the permitting stage of the project. RECOMMENDATIONS: • That water be treated as a Valued Component and not just an Intermediate component. That, due to the highly vulnerable state of our rivers and fish populations, as well as the great uncertainties connected due to climate change, the precautionary principle be applied to insure against alterations in water quality, flow, temperature and other key factors affecting the river, the fish, water sources and the watershed in general.	

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IR-01-159-d	Anonymous, Telkwa BC	(7/7) • Boundaries- Study areas for components that could affect fish, such as Water Quality and Vegetation (i.e., wetlands), include portions of Bulkley River that are not then included in the Fish and Fish Habitat impact assessment. We request that spatial assessment boundaries be revised such that all possible effect pathways are fully encapsulated. Additionally, we request that spatial boundaries generally include a more significant portion of the Bulkley River, which is omitted in relation to many aquatic components despite it being an important waterway to local communities and tributary to the Skeena River, and that impacts be predicted to Helps Creek, which is also mostly omitted in the dAIR despite Project infrastructure being built across it. • Fish - Science-based effect thresholds are used – fish are highly susceptible to adverse chronic effects of elevated metals in the surrounding environment and in their tissues. Provincial guidelines related to water quality, sediment quality, and fish tissue metals content do not cover all potentially harmful contaminants (especially regarding tissue metals), and may not always be stringent enough to protect the most sensitive species from sublethal effects; effect thresholds to fill these gaps can often be found in the scientific literature. We request that the impact assessment involve a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed.	

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IR-01-159-e	Anonymous, Telkwa BC	(1/2) 5. Water Usage - Rivers, Creeks and Underground Sources A coal mine of this nature requires the use of large volumes of water for washing the product (as noted above, according to Telkwa Coal 15,000 litres per hour at the 750,000 tonne per year production rate). This will take place alongside the mine site. Telkwa Coal claims that it hopes to obtain enough water from the neighbouring creeks, runoff and underground sources to meet its needs in this regards. If not, it will draw from other sources in the Regional District. We assume this means the Telkwa River because what other sources are there? Run-off is highly seasonal and quite variable. Underground sources both feed neighbours' wells and flow into the Telkwa where they contribute to water flow and water temperature conditions. Flow and temperature are critical to salmon survival and the conditions in the past few years have been very unfavorable to the fish due to low snowpack/ rainfall and high summer temperatures. Telkwa Coal will probably rely on historical numbers from the past 50 years or so, but, given climate change and the recent trends, these numbers may not be relevant. Neighbours are also concerned that the use of underground sources will deplete the wells they rely on for their household water supply.	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's EA Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of the application. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-159-e	Anonymous, Telkwa BC	(2/2) RECOMMENDATION: The dAIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa C0al provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	

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IR-01-159-f	Anonymous, Telkwa BC	(1/5) 6. 4. ARD and Heavy Metals Leaching a. Tailings Impoundment - Separation of Materials According to the records of an Environmental Review occurring in the mid-1990's performed for the very similar project proposed by Manalta Coal, mining coal in this location poses a substantial risk of causing Acid Rock Drainage (ARD) and leaching of heavy metals (Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc and, perhaps selenium). Telkwa Coal does not dispute that there is a risk of producing significant quantities of Potential Acid Generating (PAG) material. PAG causes ARD when the PAG material is exposed to the elements. ARD and leaching of heavy metals are known to be highly toxic to fish. To prevent ARD and leaching, all such materials must be protected from exposure to water and air indefinitely. Telkwa Coal's current plan is to create a containment pond or ponds alongside the mine and place the PAG material and other toxic sources into this containment area and cover it with water. The resulting tailings impoundment(s) will be about 1/2 the size of Tyhee Lake and about 40 metres deep .	
IR-01-159-f	Anonymous, Telkwa BC	(2/5) At the most recent Open House sponsored by the Environmental Assessment Office, Telkwa Coal's engineering consultant made the comment that the most current plan is to build the impoundment so that it sits mostly on the surface.We are not sure what this means or how this can be done. We have requested that Telkwa Coal provide us with what they describe as their comprehensive PAG Management Plan, but they have refused to do so. Telkwa Coal's plan is to separate the PAG material and the non-PAG material. The PAG material would be submerged in the containment areas and the non-PAG material would be piled alongside the mine pit and impoundment areas. Obviously for this to work, there must be a practical way to segregate these materials and to protect the PAG material from generating ARD while this segregation takes place. However, according to one of the reviewers during the Manalta project, it is highly unlikely that such a separation process could work. Furthermore, even if the separation could occur, it would take a considerable amount of time for this to take place. What happens to the acid generating material in the meantime since, as soon as the material is exposed to the environment it starts acidifying and, thus, creating polluted runoff?	

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IR-01-159-f	Anonymous, Telkwa BC	(3/5) b. Tailings Impoundment - Containment Plan Once the PAG material is submerged in a containment lake, it must be preserved there essentially forever. Another of the reviewers during the Manalta process thought that, given the topography and underlying geology of the area, including the faults and fractures that exist there, it is unlikely that the impoundment would successfully retain the ARD material/and/or heavy metals. The mine and the impoundment are on the banks of three streams: Goathorn, Tenas and Four Creeks. Each of these waterways are subject to extreme and rapid fluctuations in water level and can carry tremendous volumes of water during spring runoff and after heavy rain events. Goathorn Creek has repeatedly flooded and caused damage like destroying the bridge that has crossed it in the past. Conversely, during dry periods, very little water runs through the creeks. If the containment lake dries, it exposes the ARD which will then leach out. If it floods, it then discharges the ARD and other toxins in its overflow. We have repeatedly experienced such failures to contain toxic material in mines in B.C and even in own our area in the recent past (Mt. Polley, Huckleberry and Equity for example).	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's Environmental Assessment (EA) Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of the application. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-159-f	Anonymous, Telkwa BC	(4/5) On page 50, under Section) 4.3.3 Potential Effects) the following information is required:"The Application will describe the analysis, methodology and standards used to determine the potential effects on the Surface Water IC resulting from project activities within each phase of the Project. Interactions between Project components and activities and the Surface Water IC will be summarized. The following potential effects will be assessed for all mine phases: • Annual runoff; • Seasonal distribution of flow; • Timing and magnitude of peak and low flow events; • Changes to groundwater-surface water interactions; • Evaluation of the metal leaching and acid rock drainage (ML/ARD) potential of mined materials (e.g., mined rock and processed rock) and influence of ML/ARD on surface water quality; and • Changes to surface water quality.	

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IR-01-159-f	Anonymous, Telkwa BC	(5/5) Requiring the evaluation of the metal leaching and acid rock drainage (ML/ARD) potential of mined materials and influence of ML/ARD on surface water quality is too bare of a requirement as it allows for use of poor methodologies for characterizing ML/ARD, such as use of static testing rather than kinetic testing of the acid-generating potential of mined materials. Static testing omits information about the potential for ML/ARD as it excludes the effects of weathering on the character of mined materials over the lifetime of the mine. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	

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IR-01-159-g	Anonymous, Telkwa BC	(1/3) 7. Water Treatment - Heavy Metals and other Toxins As noted above, the mine area contains heavy metals which are toxic to fish. In addition to Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc, there is an open question about the amount of selenium that will be produced. During the Manalta process, the reviewers concluded that the amount of selenium would be below Provincial threshold levels. However, since that time, the thresholds have been lowered due to findings about fish toxicity. The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the Province. We know from the experience in Elk Valley that even the most advanced and expensive technology for removing selenium does not work. The project description for the Tenas Coal project simply states that “most” of the rock units in the project contain lower levels of selenium than other western Canadian coal projects. However, this does not mean that selenium is not a potential issue for the site, as even small amounts of selenium can have a significant environmental impact. Based on precedent at other sites in BC, the cost and complexity of selenium management can be significant and so should be accounted for at the early stages of project planning.	The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project.

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IR-01-159-g	Anonymous, Telkwa BC	(2/3) In any event, even if selenium does not end up being a factor, the other potential toxins and contaminants are. Telkwa Coal proposes to treat water runoff from its operations by cleaning it to a point where it supposedly does not pose a risk to the river and the fish and then to pipe it to the Telkwa River for discharge. Will it be possible to successfully treat and clean the runoff? Even if Telkwa Coal could successfully clean the runoff, how will dumping it into the Telkwa affect water temperature, water flow and other factors critical to water quality and the fish? a. Discharge to Telkwa River The proposed project would discharge mine impacted water directly to the Telkwa River rather than to smaller watercourses closer to the site such as Goathorn Creek, Tenas Creek or Four Creek. Larger rivers generally have more dilutive capacity than smaller creeks. However, sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these metals would cause further exceedance of BC WQGs in the Telkwa River and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water.	Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements. As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for

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IR-01-159-g	Anonymous, Telkwa BC	(3/3) b. Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The project description states that potentially acid generating (PAG) mine waste will be stored in saturated pits to prevent acid generation and reduce treatment requirements. However, even mine waste handled in this manner can release significant levels of contaminants. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved materials that are present. There are many industrially proven methods for treating mine contact water of this nature to remove dissolved species. RECOMMENDATIONS: • Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. • Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. • Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .

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IR-01-159-h	Anonymous, Telkwa BC	8. Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this may be relevant for the Tenas project is in PAG material handling. Pit capacity must be available at the same time as PAG material is generated in order to avoid temporary surface storage. RECOMMENDATION: Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.
IR-01-159-i	Anonymous, Telkwa BC	(1/3) 9. Caribou Regarding Telkwa Caribou, there lacks specific direction with respect to proponent having to address potential effects to: a) alteration and/or loss of habitat; b) change in mortality and c) change in movement patterns. Obviously, the footprint of the mine will result in direct habitat loss (existing unlogged forests) and recovering habitat loss (young forests), plus any habitat displacement impact associated with mine activity related disturbance. Caribou preferentially select habitat for avoidance, so any disturbance impact radius should be identified and considered to become unoccupied by caribou. Regarding change in mortality, that will be a useless estimate given the current low caribou population count; it may be different if the herd was fully recovered with the mortality estimate likely being statistically supported. The same applies to change in movement patterns given the fact that surviving caribou are no longer using the Goathorn Creek corridor to the Telkwa River as much as they have done in the past for a few reasons: 1) The caribou that used the Goathorn Creek corridor suffered high mortality due to landscape alterations (forestry and roads) which facilitated predator access.	

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IR-01-159-i	Anonymous, Telkwa BC	(2/3) 2) Movement patterns, in part, are attributed to learned behaviour from mothers, and when the continuity of maternal knowledge is disrupted (think of elephants in Africa), there is no way to pass the knowledge along. In this case, the likelihood of caribou using the Goathorn Ck. corridor would be by default only. Points 1 & 2 above are illustrated by the minimal telemetry locations in the area in recent years. There is no mention of the risk of acoustic displacement due to blasting, notably the potential impact to the post calving congregation area of the Camel Humps. The proponent and government know about this concern, so why is it not reflected in the dAIR? Regarding “conduct a cumulative effects assessment” there is a fundamental reason why the Telkwa caribou are at risk of imminent extirpation as declared by Catherine McKenna, Federal Minister of Environment and Climate Change on May 4, 2018: habitat fragmentation from historic adjacent areas due to Kemano project dams and resulting flooding, logging, mining, rural & urban development; habitat fragmentation within the Telkwa Caribou recovery area; current habitat fragmentation within the Telkwa Caribou recovery area due to Coastal Gaslink. Further adverse impacts are likely not to be tolerated and pose a grave threat to the herd.?	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, the TCL Environmental Assessment (EA) Application will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-159-i	Anonymous, Telkwa BC	(3/3) The impacts of the haul road on Caribou must also be considered. The road mostly is inside the Telkwa Caribou Wildlife Management area. One of the objectives of the Telkwa Caribou recovery plan was to Prevent such additional linear disturbances since they create paths for predation and provide lines of sight allowing predators to easily identify caribou locations. The road will also destroy a considerable Amount of the low elevation habitat which, as previously noted is critical for herd long term survival. Lastly, the disturbance created by the coal carrying trucks will be significant. At 750,000 tons per year Production level , Telkwa Coal estimates that one truck will pass every 10 minutes. At the 1.35 million tonnes that Telkwa Coal now says is its target, this rate will nearly double to one truck every 5 minutes. How would this allow caribou unobstructed access to the forests outside the road? RECOMMENDATION: The AIR should require an assessment of the likely impact on the success of the recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	

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IR-01-159-j	Anonymous, Telkwa BC	(1/3) 10. GHG Emissions – Full cycle including methane and alternatives. a. Life Cycle GHGs Will there be a greenhouse gas (GHG) emission assessment and will it take into account the full cycle of emissions including development, mining (including methane release – coal mining is a significant contributor to the recent rapid rise in human caused methane release and, we know that the Telkwa Coal site sits on significant amounts of coalbed methane), production, transportation and emissions from product use? While Telkwa Coal touts its project as producing metallurgical coal and that, supposedly this makes it more benign than thermal coal from an environmental standpoint, one needs to keep in mind that approximately 90% of the CO2 contained in metallurgical coal is released into the atmosphere during the steelmaking process and that steelmaking is responsible for 5-10% of all GHG emissions worldwide. In the dAIR, Telkwa Coal states it is not aware of an alternative to using coke for steel production. However, such alternative technology is now well known and includes ghg emission free methods and reduced ghg technologies (see: e.g. https://wildsight.ca/blog/2020/06/01/do-wereally-need-steelmaking-coal/) .	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.
IR-01-159-j	Anonymous, Telkwa BC	(2/3) b. Metallurgical v. Thermal Coal During the Manalta process, the highest percentage of potential metallurgical coal that was found was 50%. Manalta and the BC government always considered this area as a thermal coal site. So, how much of the coal is suitable for metallurgical use and how much is not? What happens to the coal that is not? If the coal that is not fit for steelmaking is sold, then this is not really a metallurgical coal project and will make a substantial additional contribution to greenhouse gas production. If it is not sold, but is left as waste, then this will significantly increase the problem of preventing ARD and other runoff. The non-metallurgical coal contains a great deal of sulphur and this is the source of ARD.	

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IR-01-159-j	Anonymous, Telkwa BC	(3/3) c. Methane One of our local geologists suggests that releases from the coal bed methane sources associated with the Telkwa Coal locations may be substantial during the coal mining process. So, how much methane will be released during mine operations? Given the potency of methane as a greenhouse gas, the government's plans to reduce such emissions and Telkwa Coal's promotion of its plan as not posing a likelihood of substantial emissions, this subject should be addressed. RECOMMENDATION: That the AIR include sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also require information identifying also consider whether there are alternatives to using coal in steelmaking that will produce less of a harmful effect on the environment.	
IR-01-159-k	Anonymous, Telkwa BC	(1/2) 11. Air – Dust So far, air quality issues have not been addressed in any significant way. As news from Sparwood, B.C. establishes, running a coal mine can produce a significant amount of coal dust: http://www.cbc.ca/news/canada/british-columbia/sparwood-teck-coal-mine-1.4696904 https://www.thefreepress.ca/news/teck-to-compensate-sparwood-residents-for-dust/ There's blasting, as well as dust blown off waste piles and trucks and while loading and operating railroad cars. So far, we have not heard any significant discussion about how the dust would be controlled at the Telkwa mine site itself. In regards to transportation from the mine to the loadout by truck and from the loadout to the port by train, Telkwa Coal has referred to covering the product with some form of latex material, but there are no details. Even with such a system, coal dust from rail cars can still be a problem: https://www.columbiavalleypioneer.com/news/coal-dust-escaping-rail-cars-spurs-b-c-petition/	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements sections 4.1 and 13.0). Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway)

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IR-01-159-k	Anonymous, Telkwa BC	(2/2) The Bulkley Valley already suffers from poor air quality. Our average PM <2.5 levels almost always exceed the annual Provincial targets. PM >10 is also a problem, mostly from road dust in the spring. How will the blasting, processing, transportation and storage of the coal impact our air quality, especially given that the mine site is generally upwind from Smithers? RECOMMENDATION: Air Quality should be treated as a Valued Component and the AIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, that the review take place with the objective of preventing any further degradation of air quality.	Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance.
IR-01-159-l	Anonymous, Telkwa BC	12. Noise - Amount/Distance Obviously, between blasting and heavy truck traffic, the mine and loading operations will produce a significant amount of noise. So far, it appears that the only studies about how much noise will be produced are based on computer simulations. Together with the environment, the quality of life issues valued most by area residents focus on our quiet rural lifestyle (see Regional District Rural Official Community Plan Survey results, 2012). RECOMMENDATION: As with air quality, noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed under conditions that reasonably reflect conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements, these will be covered in sections 4.1, 4.8 and 8.0.

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IR-01-159-m	Anonymous, Telkwa BC	13. Load Out – Flood Plain/ Haul Road impact According to the Regional District map, the proposed loadout facility site is on a Bulkley River floodplain. From personal experience, we know that this site is subject to flooding from the River. So, the potential is there for flood waters to wash stored coal into the Bulkley. Tenas Coal's plan is to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas Coal intends to store the wash coal on the ground, this land will be polluted for years and the only way to clean it will be to remove the soil. The haul road's planned path crosses the Helps Creek wetlands watershed for 7 km. We think this wetland and creek should be getting the	(1/2) As described in the draft Application Information Requirements (draft AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan. Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil.

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IR-01-159-m	Anonymous, Telkwa BC	same consideration asTenas, Four and Goathorn Creeks. Our concerns here, in addition to the impact on caribou, are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek. As noted in the Caribou section, the haul road is also directly inconsistent with one of the main objectives of the Caribou recovery plan, which is to eliminate and not expand linear disturbances and to allow the herd to use the lower elevation forests in an undisturbed fashion. RECOMMENDATION: There will need to be a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(2/2) The dAIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the agricultural land reserve. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd. Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the recovery program. The assessment on caribou (see draft AIR section 4.8) will include consideration of the existing and historical disturbances mentioned. The assessment will focus on a quantitative, science-based approach using 20 years of telemetry and mortality data from the current population and will assess habitat disturbance, mortality, movement, and sensory disturbance. TCL's EA Application will identify measures to avoid, manage or otherwise mitigate potential adverse effects following the hierarchical procedure of avoid, minimize, restore, and offset, among other best practices. Although implementation of the Recovery Program is outside the scope of this Project, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-159-n	Anonymous, Telkwa BC	14. Telkwa Coal Finances and Bond Reclamation and Closure Plan Allegiance Coal, the company behind the Tenas Project, is a thinly capitalized company with a weak financial position. The following publicly available as of 2020-6-23 shows that Allegiance Coal, trading at a price of 7 cents per share, has a market capitalization of only 40.28 million ASD, cash on hand of only 1.43 million ASD, with a debt of 2.32 million ASD, and a negative cash flow of 1.86 million ASD over the twelve trailing months. If there were an accident or malfunction at the mine, or if the mine entered its reclamation and post-closure phase, then a reasonable question is: what resources are available to minimize the environmental and social impacts of the possibility of the company's inability to pay? RECOMMENDATION: • That the dAIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. • All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.
IR-01-159-o	Anonymous, Telkwa BC	15. Jobs and Economic Opportunities The dAIR refers to the jobs that would be created through the coal mine project. However, much of the economic opportunities that have arisen in the Bulkley Valley during the last few years have come from such sources as tourism, recreation, amenity migration, home construction and real estate. All of these sectors depend in whole or in part on the preservation of a lifestyle connected to nature and natural beauty. The introduction of an open pit coal mining operation with its associated noise, dust and effects on the natural world will obviously have some negative effects on these economic sectors. For instance, what impact will it have on property values, air and noise pollution and the fishing based tourism economy? RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4) . Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (draft AIR section 6.5).

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IR-01-160-a	Anonymous, Smithers	1. The project started at a modest projected daily production of 240,000 tonnes. Then it got increased to three times that. Telkwa Coal, according to its documents, is planning to almost double this number again to 1.35 million tonnes/ day. This is a different project from the one that was proposed. The process needs to be started over in the light of these numbers.	Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.
IR-01-160-b	Anonymous, Smithers	2. Water must be treated as a valued component in the assessment. Water has direct value to the citizens of the Bulkley Valley and British Columbia, as well as to fish, other aquatic life, and other life forms that depend on the Bulkley and Skeena rivers.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance [https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf] on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.
IR-01-160-c	Anonymous, Smithers	3. The proposals' water budget leaves too much to be determined. Particularly if production is to be increased to 1.35 million tonnes/ day, it is unlikely that there will be enough water in the sources outlined in the proposal.	As per provincial regulatory requirements, a site-water balance will be provided in TCL's Environmental Assessment (EA) Application. TCL's EA Application will be for a 775,000 to 825,000 tonnes annual production.
IR-01-160-d	Anonymous, Smithers	4. The method proposed for separating inert and potentially acid material is unproven and probably impractical. Given the unlimited time that acid generating material must be submerged in water, this alone is enough grounds to not permit the project.	The method proposed for separating Potentially Acid Generating (PAG) from non-PAG material at the Tenas Project is in use in northeast British Columbia and has proved effective and practical. It is using the presence of thin coal seams to indicate the location of PAG and non-PAG material. Submerging PAG material underwater to limit Acid Rock Drainage (ARD) is a method used in BC at numerous operating metal mines, including ones in the region. Our Metal Leaching/ARD Management Plan is being developed by registered professional geoscientists and the Ministry of Energy, Mines and Petroleum Resources is responsible for reviewing this plan.

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IR-01-160-e	Anonymous, Smithers	5. It is a well know fact that mines sometimes are dormant, or that they go bankrupt suddenly. Such periods are not accounted for in the proposal.	We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Our Reclamation and Closure Plan will have care and maintenance procedures. This is a permitting requirement.
IR-01-160-f	Anonymous, Smithers	6. Telkwa Coal claims that its product is metallurgical coal. This is at least dubious as the grade is not particularly good. Telkwa Coal has admitted that they have no control over the destination of their product. It could be used in steel-making, it could be used in thermal plants, and it could be mixed with other coal. In any case, coal combustion as well a its use in steel making releases large amounts of CO_2 into the atmosphere. It is generally agreed that this must stop. The proposal does not address the climate emergency and should be disallowed on those grounds.	The coal at the Tenas deposit is intended for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Globally, the steel mills blend a variety of coking coals to arrive at an optimum product feed for their coke ovens based on the demands of their blast furnace – not all blast furnaces are built the same. Coking coals like coal itself, have different qualities and some are more readily available than others. Some steel mills, in particular the more modern steel mills in Asia, use up to 30 different coking coals in their coke oven feed. Tenas coal is what is referred to in the global market place as a 'mid-volatile semi-coking coal' sought after by the Japanese and South Korean steel mills for their coke oven blends.
IR-01-160-g	Anonymous, Smithers	7. Tourism has, until the pandemic hit, been a mainstay of the local as well as the provincial economy. Mining's contribution is not even close. The eyesore, the noise, the dust pollution and the impacts on visual quality are very likely to have a serious negative impact on those qualities that make the valley a tourism destination. The mine will last a few years. That short term economic activity should not be allowed to permanently damage far more sustainable and lucrative industries.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. The draft AIR includes a visual quality assessment (section 6.2), a noise assessment (section 4.1), an air quality assessment (section 4.1) and an economic assessment (section 5.2)
IR-01-160-h	Anonymous, Smithers	8. Mining is a notoriously volatile and often fraudulent industry. Allegiance Coal is a foreign company with very limited capital. In the event of a major mishap at the mine, or a sudden drop in the value of coal, experience suggests that the company would simply disappear leaving the environment and the public to look after the remnants of the project. This should not be acceptable.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

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IR-01-161	Dave Shannon, Terrace, BC	(1/2) My main concern is the proximity of the proposed project to the Core Recovery portion of the Telkwa Caribou Recovery Area (TCRA). Blasting on the 10km2 footprint of the open pit coal mine could place unnecessary stress on caribou inhabiting the preferred calving zone (Core Recovery Area) from this much diminished herd, currently in danger from extirpation from its historical range. At 1300km2 the Telkwa Caribou Herd Recovery Area represents just 3% of its historical range. Although the proposed open pit coal mine would be located on the Integrated Use area of the TCRA, its blasting noise radius of potentially more than 10 km2 would chisel off even more territory from the caribou recovery zone. I see more than caribou at risk from the project. Should the further loss of preferred habitat induce the caribou to relocate to a different area, the relocation could put caribou predators in the cross hairs of an unnecessary wolf cull. The BC government is already promoting a very questionable and legally challenged aerial wolf cull because of disappearing caribou habitat brought on by human activities such as resource roads, motorized recreation, deforestation, pipelines, and mining activities.	Thank you for your interest in the Tenas Project. Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape), it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, the assessment of caribou will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program. The assessment of this project will include analysis of potential effects including alteration and/or loss of habitat, sensory disturbance, change in mortality, and change in movement patterns, as required by the indicators specified in the section 4.8 of the draft Application Information Requirements (AIR). TCL's Environmental Assessment (EA) Application will identify measures to avoid, manage or otherwise mitigate potential adverse effects following the hierarchical procedure of avoid, minimize, restore, and offset, among other best practices. Although wildlife management is not within the scope of authority of TCL, the EA Application will provide information that is potentially useful to those responsible for management directives for the TCH. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of the TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The concerns being raised are specifically being addressed in aquatic modeling.
IR-01-161	Dave Shannon, Terrace, BC	(2/2) At a population of 32 caribou currently in the TCRA, this herd cannot suffer further degradation of its habitat from an open pit coal mine. I am also concerned that the acid rock drainage from the coal mine and its tailings could affect water runoff into the Bulkley and Skeena River systems affecting salmon habitat. Thank you for inviting public comments. Dave Shannon, P. Eng, (retired), Energy Chair, Terrace Chapter of Council of Canadians Mary Ann Shannon, Secretary, Terrace Chapter of Council of Canadians Attached Document: Comments on the Proposed Telkwa Coal Open Pit Mine	

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IR-01-161-a	Dave Shannon, Terrace, BC	My main concern is the proximity of the proposed project to the Core Recovery portion of the Telkwa Caribou Recovery Area (TCRA). Blasting on the 10km^2 footprint of the open pit coal mine could place unnecessary stress on caribou inhabiting the preferred calving zone (Core Recovery Area) from this much diminished herd, currently in danger from extirpation from its historical range. At 1300km^2 the Telkwa Caribou Herd Recovery Area represents just 3% of its historical range. Although the proposed open pit coal mine would be located on the Integrated Use area of the TCRA, its blasting noise radius of potentially more than 10 km^2 would chisel off even more territory from the caribou recovery zone.	The potential effects of noise on caribou will be assessed under Sensory Disturbance as described in section 4.8 of the draft Application Information Requirements (AIR). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the recovery program. However, this assessment will provide analyses of TCH data and an assessment of existing cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program. The assessment of caribou for this Project will include analysis of potential effects including alteration and/or loss of habitat, sensory disturbance, change in mortality, and change in movement patterns, as required by the indicators specified in section 4.8 the draft AIR. Although wildlife management is not within the scope of authority of TCL, TCL's Environmental Assessment (EA) Application will provide information that is potentially useful to those responsible for management directives for the TCH.
IR-01-161-b	Dave Shannon, Terrace, BC	I see more than caribou at risk from the project. Should the further loss of preferred habitat induce the caribou to relocate to a different area, the relocation could put caribou predators in the cross hairs of an unnecessary wolf cull. The BC government is already promoting a very questionable and legally challenged aerial wolf cull because of disappearing caribou habitat brought on by human activities such as resource roads, motorized recreation, deforestation, pipelines, and mining activities. At a population of 32 caribou currently in the TCRA, this herd cannot suffer further degradation of its habitat from an open pit coal mine.	The assessment of caribou for this Project will include analysis of potential effects including alteration and/or loss of habitat, sensory disturbance, change in mortality, and change in movement patterns, as required by the indicators specified in section 4.8 the draft Application Information Requirements (AIR). TCL's Environmental Assessment (EA) Application will identify measures to avoid, manage or otherwise mitigate potential adverse effects following the hierarchical procedure of avoid, minimize, restore, and offset, among other best practices. Although wildlife management is not within the scope of authority of TCL, TCL's EA Application will provide information that is potentially useful to those responsible for management directives for the Telkwa Caribou Herd.
IR-01-161-c	Dave Shannon, Terrace, BC	I am also concerned that the acid rock drainage from the coal mine and its tailings could affect water runoff into the Bulkley and Skeena River systems affecting salmon habitat.	Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As directed in the draft Application Information Requirements, these topics will be addressed in the water, aquatics, fish and fish habitat chapters of TCL's Environmental Assessment (EA) Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).
IR-01-162	SkeenaWild Conservation Trust, Terrace, BC	Comments attached. Thank you. Document Attached: SW Tenas dAIR public comment_final July 2020.docx	See separate response memo to Skeena Wild available on ePIC.

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IR-01-162-a	SkeenaWild Conservation Trust, Terrace, BC	Adhere to the 2018 Environmental Assessment Act The revitalized Environmental Assessment Act would encourage greater public confidence and participation, uphold the rights of Indigenous peoples, and support more robust science in development of the Project. We request that, in an act of good faith, the Project pursue its EA Certificate under the new (2018), as opposed to the old (2002), legislation.	Our project has been under the 2002 *Environmental Assessment (EA) Act* since November 2018. The new *EA Act* came into force, with regulations in December 2019, more than a year after our work with the Environmental Assessment Office (EAO) began. While we have elected to continue with the original process, we have always strived to exceed public consultation requirements. As an example, we have already held more open houses than what is required. Through that early public engagement, we have made material changes to our project in direct response to the local community, such as building a Bypass Road. We will continue to strive to exceed the public consultation requirements - even for the new *EA Act.* The Project is undergoing a full environmental assessment/regulatory review through the BC E*nvironment Assessment Act* , the BC *Mines Act* and the BC *Environmental Management Act* as well as the numerous pieces of legislation, regulation, policies and technical guidance documents and a dozen more permits or licenses required prior to operations. And we will continue to follow the process that the Office of the Wet'suwet'en have set out for us.
IR-01-162-b	SkeenaWild Conservation Trust, Terrace, BC	Include comprehensive reclamation and post-closure planning Risks associated with mining often are not realized until well after mine closure. To ensure that long-term social and environmental safety is adequately safeguarded – and not prioritized over short-term economic considerations – we request that the Project's impacts be thoroughly assessed for the full post-closure period. This will require a commitment in the final AIR to include comprehensive reclamation and post-closure plans upon which impact assessments are based.	A Reclamation and Closure Plan will be prepared as part of TCL's Environmental Assessment (EA) Application. This is a requirement of the EA and permitting.

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IR-01-162-c	SkeenaWild Conservation Trust, Terrace, BC	Alternatives assessments must be rigorous and fully transparent In assessing alternative means of carrying out the Project, options that carry fewer risks may be overlooked, or they may be assessed but rejected. To minimize risks of water contamination, we request that source control measures be thoroughly assessed for managing Potentially Acid-Generating (PAG) waste; specifically, we request that options for i) blending PAG and non-PAG waste, and ii) desulphurizing or neutralizing PAG waste be assessed. To minimize risks of catastrophic failure associated with water-covered waste storage facilities, we request that options for i) dry storage of waste materials, ii) drainage and dry covering of waste facilities at mine closure, and iii) compaction of waste in storage be assessed. Transparency regarding alternatives assessments helps ensure stakeholder and public confidence that the Project will proceed in the most responsible manner. We request that detailed rationales for all alternatives (chosen and rejected) be provided; if some alternatives were considered but deemed not technically or economically feasible for assessment, please report these and explain clearly why they are not deemed feasible. Additionally, please include detailed explanations (quantitative in nature wherever possible) of all uncertainties regarding the evaluation and comparison of alternatives.	As described in the draft Application Information Requirements (AIR) section 1.3 Project Design and/or Alternative Means of Carrying out the Project, and section 1.4, Alternatives to the Proposed Project, will be included in TCL's Environmental Assessment (EA) Application.

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IR-01-162-d	SkeenaWild Conservation Trust, Terrace, BC	(1/5) Potential aquatic impacts must be fully understood and adequately assessed As the dAIR is currently written, we see a number of gaps in the assessment of potential aquatic impacts from the Project, which will make it difficult to quantify such impacts. Selection of Valued Components must be broader The dAIR considers Surface Water, Groundwater, and Aquatic Resources as Intermediate Components (ICs), the impacts to which then funnel into a significance determination regarding impacts to Fish and Fish Habitat – the only aquatic Valued Component (VC). This is an unusual framework, one that has not been followed by several recently assessed mines in BC (such as KSM, Brucejack, and Kemess Underground). We believe that this framework creates an unnecessary degree of uncertainty regarding effect pathways, and likely will result in significant aquatic impacts of the Project being overlooked. Indicators related to surface water, groundwater, and aquatic resources often are more amenable to rigorous monitoring and evaluation against effect thresholds, and mining has the potential to cause significant adverse effects to all of them. EAO guidelines for selection of VCs thus suggest that Surface Water, Groundwater, and Aquatic Resources should be considered VCs – not ICs – in the Project's final AIR.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL

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IR-01-162-d	SkeenaWild Conservation Trust, Terrace, BC	(2/5) Impact assessments must be comprehensive, conservative, and scientifically defensible In the Project's assessment of potential aquatic impacts, we urge that: i.Scientific rigour is a priority. This includes using conservative parameters when assessing impacts (and reporting how such parameters were derived), providing detailed explanations (quantitative in nature wherever possible) of any uncertainty regarding parameters or predictions, and demonstrating that robust sampling has been performed. We are particularly concerned that adequate sampling be performed in estimating the PAG component of mine materials and potential for acidic drainage and/or contaminant leaching (especially of Selenium, nitrates, and sulphates), and that detailed contingency plans are presented to account for potential inaccuracies in these estimations. We also urge that the final AIR include environmental baseline characterization that is based on robust 3-5 year datasets for all aquatic indicators that span all seasons (currently, the dAIR states that some baseline datasets related to aquatic components – such as surface water and aquatic resources – contain only 1 year of baseline sampling).	2021 on EPIC for a more detailed explanation. Water quantity and quality modeling include inputs derived from local monitoring data and long-term regional monitoring data. Best practice techniques are used in the generation of additional model inputs, and where uncertainty in data inputs exists, additional conservatism will be incorporated, which will be discussed in model reporting. New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC MOE, 2016) sampling for both monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012). We have collected aquatic resources (i.e., biota) samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC Ministry of Environment (MOE) recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016). We have enlarged both the local study area and the regional study area for aquatic resources and fish and fish habitat. They are now the same. Rainbow trout were selected as the indicator fish species for water quality assessments as they were the only species with sufficient numbers throughout potentially affected watercourses to serve as an indicator fish species and they are the least migratory of the species that are present. There were no populations of resident sculpin or other less migratory species in Tenas, Goathorn, Four, or Helps Creek. All species present are serving as indicator species for the fish and fish habitat assessment. Relative abundance, densities, and fish condition will be used to assess potential effects on fish health and habitat quality/productivity. BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of
IR-01-162-d	SkeenaWild Conservation Trust, Terrace, BC	(3/5) ii.Appropriate indicators and monitoring sites are chosen. Specifically, we request that potential impacts to whole sediment samples and the bioavailable fraction of sediments (i.e., the smaller grain sizes) be included. Additionally, we request that fish indicators include a fish species with a relatively small territorial distribution (such as freshwater sculpin, if present), so that any localized Project impacts can be adequately determined. In selecting salmonid indicator(s), we request that species home range be considered, such that mine-exposed and reference sites are far enough away to ensure individuals are not likely to move between sites. Lastly, we request that fish species identified as significant to affected Indigenous communities (i.e., the Wet'suwet'en) be included as indicators.	

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IR-01-162-d	SkeenaWild Conservation Trust, Terrace, BC	(4/5) iii.Comprehensive spatial boundaries be used. Currently, the dAIR outlines spatial boundaries among the different aquatic components for assessment that are inconsistent with one another, which we believe may prevent potential impacts from being detected. For example, study areas for components that could affect fish, such as Water Quality and Vegetation (i.e., wetlands), include portions of the Bulkley River that are not then included in the Fish and Fish Habitat impact assessment. We request that spatial assessment boundaries be revised in the final AIR such that all possible effect pathways are fully encapsulated. Additionally, we request that spatial boundaries in general include a more significant portion of the Bulkley River, which currently is omitted in relation to many aquatic components despite it being an important waterway to local communities and major tributary to the Skeena River, and that impacts be predicted to Helps Creek, which also is mostly omitted in the dAIR despite Project infrastructure being built across it.	Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Environmental thresholds are established in permitting using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* ." Please refer to the draft AIR and an early version of our baseline report on EPIC (ERM 2018) for more detail regarding our aquatic baseline program, including sampling locations and methodology. Subaqueous storage of Potentially Acid Generating (PAG) material limits Acid Rock Drainage (ARD) and metal leaching by preventing sulphide oxidation, and is an effective mitigation strategy for Metal

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IR-01-162-d	SkeenaWild Conservation Trust, Terrace, BC	(5/5) iv.Science-based, or a “no-change”, effect threshold be used. Fish are highly susceptible to adverse acute and chronic effects of elevated metals in their environment. Provincial guidelines related to water quality, sediment quality, and fish tissue metals content do not adequately cover all potentially harmful contaminants (especially regarding tissue metals), nor are they often stringent enough to protect fish from sublethal effects (Price 2013); effect thresholds to fill these gaps often can be found in the scientific literature. We request that the impact assessment involve a comprehensive literature review to select conservative effect thresholds – or simply adhere to a “no-change” threshold whereby water quality, sediment quality, and fish tissue metals content must remain the same during Project construction and operations, and after Project closure, as they are currently – that ensure potential impacts to valuable aquatic resources are not missed. v.Significance determinations follow the Precautionary Principle. Changes to the aquatic environment are not easy to contain and can have unpredictable long-term consequences. It is our view that given this uncertainty, the severity of potential impacts (i.e., in terms of magnitude, geographic extent, duration, frequency, reversibility, and context) must be considered more heavily than the likelihood of potential impacts. We urge that potential impacts that are severe in nature, be deemed significant, even if there is a low likelihood of the impacts occurring.	Leaching (ML)/ARD as per the Guidelines for Metal Leaching and Acid Rock Drainage at Minesites in British Columbia (EMPR 1998). The geochemistry studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) has been followed for these studies and used to develop an understanding of where the PAG rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials. The mine will be operated according to the metal leaching/acid rock drainage (ML/ARD) Management Plan (draft AIR section 13.0) currently being prepared as part of the application. References can be found in section 4.3.2 of the draft AIR. A geochemistry baseline report will also be submitted with TCL's Environmental Assessment (EA) Application that specifies the characterization methods and geochemical testing results.

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IR-01-162-e	SkeenaWild Conservation Trust, Terrace, BC	Potential impacts of accidents and effects of the environment on the Project must be fully understood and adequately assessed Water-covered waste storage facilities, as currently planned for the Project, bring risk of catastrophic dam failure. Additionally, the Project is located in an area of high precipitation, and within a floodplain. We urge that assessments of potential impacts of accidents and/or natural hazards be based on comprehensive assessments of existing conditions (e.g., geotechnical assessments) and demonstrated thorough modeling, and that they report detailed explanations (quantitative in nature wherever possible) of all uncertainties regarding parameters or predictions. We urge that worst-case scenarios, including Probable Maximum Precipitation, Probable Maximum Flood and Maximum Credible Earthquake events, be assessed – with consideration for future changes to precipitation as a result of climate change and for the fact that the Project's dams and water covers are planned to be there forever. Also, we request that the assessment of potential impacts specifically consider the proximity of the Project to human communities and important cultural resources (e.g., archaeological sites), and deem potentially severe impacts as significant even if there is a low likelihood of occurrence.	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0). In addition, a dam break analysis (section 9.0) will be conducted to aid in the development of a Mine Emergency Response Plan (section 13.0). Consideration of climate change, and effects to human health, cultural heritage, and environmental effects will also be included. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-162-f	SkeenaWild Conservation Trust, Terrace, BC	Indigenous rights and title must be upheld to the highest level In recognition of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), and BC's commitment to its implementation, we urge that the Project only receive EA approval if a formal agreement has been established between the proponent (i.e., Telkwa Coal Limited) and the Wet'suwet'en that offers free, prior, and informed consent on behalf of the Wet'suwet'en to the Project being developed.	Our relationship with the Wet'suwet'en is of great importance to us. From the outset, we have been clear in our commitment to have open engagement and communication with the Wet'suwet'en and we signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us.

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IR-01-162-g	SkeenaWild Conservation Trust, Terrace, BC	Other practices that enhance the Project's social and environmental responsibility We urge the proponent to participate in an independent, third-party responsible mining program (such as the Initiative for Responsible Mining Assurance). We also request that independent, third-party review be sought for elements of the Project's design and EA related to waste management, water management, reclamation and post-closure planning, and impacts to important species; examples of these elements include PAG estimation and related management of acidic drainage and contaminant leaching, dam design and related accident assessments, and assessments of impacts to salmonids. Lastly, we urge that transparency regarding Project-related costs be offered, including full cost estimates for reclamation and post-closure and liability estimates for unexpected events or catastrophic accidents.	We understand that the Mining Association of Canada's Towards Sustainable Mining (TSM) https://mining.ca/towards-sustainable-mining/ Program is recognized by international industry organizations in countries such as Norway and Finland who have signed on to TSM. We will investigate participation in TSM. TCL's Environmental Assessment (EA) Application will be written by independent, qualified persons and professionals registered with their respective associations. We are following the environmental assessment process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are a required part of the process, and we are working with the Wet'suwet'en, public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. The BC *Professional Governance Act* ensure that professionals in the various associations (College of Applied Biology [CAB], Association of Professional Engineers and Geoscientists BC [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-163-a	Kathleen Ruff, Smithers	The health of our rivers, water, air and soil are key values for the people living in the Bulkley Valley. Ensuring that they are managed responsibly is critical to the environmental, human and economic well-being of the region not only for the current population but also for generations to come. I ask that water, air and soil must be treated as Valued Components in this Environmental Assessment and not be relegated to second-class status as being only Intermediate Components. The impact of the proposed project on the quality of water, air and soil must be thoroughly and rigorously examined and based on independent, reputable scientific evidence.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. This is the same for soils and air quality. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance (dAIR sections 4.1, 4.2, 4.7, 4.8, 8.0). In accordance to Environmental Assessment Office (EAO) guidance, air, soils, and surface water were originally designated as Intermediate Components (ICs) (draft AIR section 4.1, 4.2, 4.3). All components will now be assessed as a VC, regardless of being a pathway or receptor component, and will cross reference other supporting VC assessment sections.

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IR-01-163-b	Kathleen Ruff, Smithers	The issue of air pollution and its harmful impact on human health, as well as the climate impact of greenhouse gas emissions must be thoroughly and rigorously examined and based on independent, reputable scientific evidence.	The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). Greenhouse gas (GHG) emissions will be assessed from the mine site, haul road and rail infrastructure. GHG emissions (draft Application Information Requirements [AIR] section 4.1) will be compared to similar mines, provincial and federal inventories. Greenhouse gas management measures will be developed (included in the Air Quality Management Plan section 13.0 of the dAIR) to lower GHG emissions, taking into account both the provincial and federal GHG reduction targets. The BC Environmental Assessment Office (EAO) will determine who reviews TCL's Environmental Assessment (EA) Application. Air quality will be considered in the human health assessment (draft AIR section 8.0).
IR-01-163-c	Kathleen Ruff, Smithers	The impact of the proposed mine on the ecosystem, fish, wildlife, as well as human health, must be thoroughly and rigorously examined and based on independent, reputable scientific evidence.	As per the draft Application Information Requirements (AIR), your inquiry will be addressed in TCL's Environmental Assessment (EA) Application, which will be written by qualified parties and independent scientists registered with their respective professional associations and reviewed by government personnel with expertise and experience in these subjects. The BC *Professional Governance Act* ensures that professionals in the various associations (College of Applied Biology (CAB), Association of Professional Engineers and Geoscientists BC (APEGBC), Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines.
IR-01-163-d	Kathleen Ruff, Smithers	Fishing, recreation and tourism are important components of a sustainable economy for our region. We have a serious responsibility not to jeopardise or destroy this economic base that contributes to the well-being of the region. This issue must be included in the review process.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4). Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC.
IR-01-163-e	Kathleen Ruff, Smithers	The assessment must require that care and maintenance are included in the evaluation of the project. The responsibility for care and maintenance must be assigned to the project proponents and must not be put on the backs of taxpayers.	We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Our Reclamation and Closure Plan (section 13.0) will include care and maintenance procedures. This is a permitting requirement.

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IR-01-163-f	Kathleen Ruff, Smithers	The proposed mine is on the territory of the Wet'suwet'en people. The government must ensure that the process that is followed complies with our obligations under the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. From the outset, we have been clear in our commitment to have open engagement and communication with the Wet'suwet'en and we signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us.
IR-01-164	Anonymous, Chilliwack, BC	I recently had the pleasure of visiting this beautiful area of B.C. I believe that allowing a coal mine in this area would have a negative impact on the people and the environment. So many possibilities for long term damage to the clean air and water due to coal mining. If the need here is for jobs, please look for other options rather than this dirty industry.	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in the Application. As described in the draft AIR sections 4.0 to 14.0, topics raised will be addressed in TCL's Environmental Assessment (EA) Application. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.
IR-01-165	What Matters In Our Valley, Telkwa, BC	Document Attached: 2020 July_Summary WMIOV Comments on dAIR.pdf	We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application.

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IR-01-165-a	What Matters In Our Valley, Telkwa, BC	1. Size Matters When Telkwa Coal first proposed this project, it stated that its plan was to develop an open-pit coal mine producing 240,000 tonnes of coal per annum (tcpa) of product. This production level happened to be just under the then existing Provincial Environmental Assessment threshold of 250,000 tcpa. WMIOV and others complained to the Ministry about what seemed to be a transparent attempt to get around the EA process. Telkwa Coal then revised its proposal and submitted a draft mine plan identifying the mine project's objective to be 750,000 tcpa. However, since then, in its public statements to the business community contained in its Corporate Reports, Telkwa Coal has repeatedly stated that its true objective is to "ramp up" to 1.35 million tonnes per year. (See, e.g. Allegiance Coal (Telkwa Coal's Corporate parent) Corporate Presentation, May 2020, p. 8.) Despite this, the Environmental Assessment office continues to review this proposal as if it were for a mine producing at the 750,000 tcpa level. So which is it? If 1.35 million tonnes, it simply does not make sense for the Environmental Assessment to take place based on misinformation about the scope of the project. Size matters because it affects all of the potential environmental and social impacts. Just as one example, while Telkwa Coal currently describes its proposed water usage for cleaning coal as 15,000 litres per hour, under the 1.35 million tonne scenario, usage would have to be almost twice that. What effect will this have on toxins, water runoff, water sources, capacity to control acid rock drainage (ARD) and cumulative effects? RECOMMENDATION: That the EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.

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IR-01-165-b	What Matters In Our Valley, Telkwa, BC	(1/2) 2. Water and Fish Water - The dAIR relies on what are known as Valued Components (VC). These are the attributes and potential areas of concern that are most important in judging the mine proposal's merits. Surprisingly, Water is not identified in the dAIR as one of the Valued Components. Instead, it is considered an Intermediate Component (IC). ICs can be ignored in the final analysis, as long as the VCs they are related to (in this case fish) are sufficiently protected or, even if there are ill effects, those effects can be adequately mitigated. In other words, as long as there are not unacceptable risks to the fish or if mitigation is possible, then protecting water will not be a priority under the current dAIR. Water has both high societal value and high ecological value and therefore should be selected as a Valued Component as part of this Environmental Assessment, and not just as an Intermediate Component. Our rivers and our water quality are of immense historical and cultural importance to the people of the Bulkley/Wetzinkwa Valley. The attempt to diminish that importance in the review of this project is frankly surprising, especially given the quite serious risks the project poses to these treasured parts of our heritage.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these

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IR-01-165-b	What Matters In Our Valley, Telkwa, BC	(2/2) Fish – The boundaries for review under the dAIR are limited to the Telkwa and a short stretch of the Bulkley just down stream from the confluence. Given the importance of the rivers and the fish, as well as the significant threats that already exist to fish survival, this seems quite inadequate. In addition, while the dAIR refers to relying on current science-based thresholds for contaminants that pose a risk to fish, those thresholds may not be sufficient to actually protect fish stocks. Our fish runs are already imperilled. Levels of heavy metals in the Telkwa are already significant. We suggest that the impact assessment include a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed. RECOMMENDATIONS: • That Water be treated as a Valued Component in the dAIR. • That the boundaries set for analysis of adverse effects include the entire Skeena system. • That the precautionary principle be applied due to the pre-existing threats to fish survival. • That the AIR call for a review of the latest scientific literature and analysis to help determine appropriate thresholds for fish toxicity, including sub-lethal effects.	topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) Project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .

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IR-01-165-c	What Matters In Our Valley, Telkwa, BC	3. Water Usage - Rivers, Creeks and Underground Sources A coal mine of this nature requires the use of large volumes of water for washing the product (as noted above, according to Telkwa Coal 15,000 litres per hour at the 750,000 tonne per year production rate). The washing of the coal will take place alongside the mine site. Telkwa Coal claims that it hopes to obtain enough water from the neighbouring creeks, runoff and underground sources to meet its needs in this regard. If not, it will draw from other sources in the Regional District. We assume this means the Telkwa River because what other nearby sources are there? Neighbours are also concerned that the use of underground sources will deplete the wells they rely on for their household water supply. RECOMMENDATION: The AIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa Coal provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	The draft Application Information Requirements (draft AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As identified in the draft AIR sections 4.3 and 4.4, surface water and groundwater are components of TCL's EA Application with their subcomponents of quantity and quality. As well, fish and fish habitat are included as components in TCL's EA Application (draft AIR section 4.6). These chapters will be presented in TCL's EA Application, along with a water balance. The water balance model will consider climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses have been included to further strengthen the positive water balance for the water covers.

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IR-01-165-d	What Matters In Our Valley, Telkwa, BC	(1/2) 3. Acid Rock Drainage and Metal Leaching a. Tailings Impoundment - Separation of Materials Telkwa Coal acknowledges that its operations will produce significant quantities of Potential Acid Generating (PAG) materials. PAG results in Acid Rock Drainage if exposed to the elements. There is also a substantial risk of leaching of heavy metals. Heavy metals are highly toxic to fish. To prevent ARD, Telkwa Coal must separate PAG from non- PAG and then remove the PAG from contact with the environment forever. Telkwa Coal's current plan is to create a containment pond or ponds alongside the mine and place the PAG material and other toxic sources into this containment area and cover it with water. The resulting tailings impoundment(s) will cover an area about 1/2 the size of Tyhee Lake and about 40 metres deep. To carry out this plan, Telkwa Coal must separate the PAG material and the non-PAG material. The PAG material would then be submerged in the containment areas and the non-PAG material would be piled alongside the mine pit and impoundment areas. However, according to one of the reviewers during the similar Manalta project in the mid-1990's, it is highly unlikely that such a separation process could work. Even if the separation could occur, it would take a considerable amount of time for this to take place. What happens to the acid generating material in the meantime since, as soon as the material is exposed to the environment it starts acidifying and, thus, creating polluted runoff?	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's EA Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of TCL's EA Application. A geochemistry baseline report will also be submitted with the EA Application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-165-d	What Matters In Our Valley, Telkwa, BC	(2/2) b. Tailings Impoundment - Containment Plan Once the Acid Rock generating material is submerged in a containment lake, it must be preserved there forever. Reviewers during the Manalta process thought that, given the topography and underlying geology of the area, including the faults and fractures that exist there, it is unlikely that the impoundment would successfully retain the ARD material and/or heavy metals. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	

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IR-01-165-e	What Matters In Our Valley, Telkwa, BC	(1/3) 5. Water Treatment - Heavy Metals and other Toxins The mine area contains heavy metals which are toxic to fish. In addition to Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc, there is an open question about the amount of selenium that will be produced. During the Manalta process, the reviewers concluded that the amount of selenium would be below Provincial threshold levels. However, since that time, the thresholds have been lowered due to findings about fish toxicity. a. Removal of heavy metals and other toxins The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the Province. We know from the experience at the Teck mines in the Elk Valley that even the most advanced and expensive technology for removing selenium does not work. Telkwa Coal proposes to treat water runoff from its operations by cleaning it to a point where it supposedly does not pose a risk to the river and the fish and then to pipe it to the Telkwa River for discharge. Will it be possible to successfully treat and clean the runoff?	The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project. Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements. As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under
IR-01-165-e	What Matters In Our Valley, Telkwa, BC	(2/3) b. Discharge to Telkwa River Even if Telkwa Coal could successfully clean the runoff, how will dumping it into the Telkwa affect water temperature, water flow and other factors critical to water quality and the fish? The proposed project would discharge mine impacted water directly to the Telkwa River. Sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these metals would cause further exceedance of BC WQGs in the Telkwa and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water. c. Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved materials that are present. There are many industrially proven methods for treating mine contact water of this nature to remove dissolved species.	

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IR-01-165-e	What Matters In Our Valley, Telkwa, BC	(3/3) RECOMMENDATIONS: • Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. • Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. • Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	the *Environmental Management Act* .
IR-01-165-f	What Matters In Our Valley, Telkwa, BC	6. Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this may be relevant for the Tenas project is in PAG material handling. Pit capacity must be available at the same time as PAG material is generated in order to avoid temporary surface storage. RECOMMENDATION: That Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.

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IR-01-165-g	What Matters In Our Valley, Telkwa, BC	7. Caribou The Telkwa Caribou herd is listed under the Species at Risk Act and is identified as at threat of imminent extirpation. The herd is currently at approximately 34 animals. To prevent extinction of the herd, a Wildlife Management Area was recently created in the Telkwa Mountains. The long term goal is to restore a mature forest with limited disturbances in the form of logging, road building and further habitat destruction. The Telkwa Coal Mine location is almost completely within the Telkwa Caribou Wildlife Management Area. It will result in a removal of a substantial area of re-growing forest and create a haul road that will cross a part of the recovery zone. Coal hauling trucks will pass along this road somewhere between every 5 and 10 minutes. The establishment of the mine is inconsistent with the Caribou recovery plan and will prevent the return of undisturbed mature forests in the area. As a consequence, it will put further pressure on a herd that is already on the brink just as it starts to recover. RECOMMENDATION: That the AIR should require an assessment of the likely impact on the success of the Caribou recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, TCL's Environmental Assessment (EA) Application will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-165-h	What Matters In Our Valley, Telkwa, BC	8. GHG Emissions – Full cycle including methane and alternatives While Telkwa Coal identifies this project as intended to produce coal for steelmaking (metallurgical coal) and not for energy production (thermal coal), this does not resolve the question of its effect on greenhouse gas emissions. 90% of the CO2 contained in metallurgical coal is released during the steel making process. Steel making itself is responsible for somewhere between 5 and 10% of total greenhouse gas emissions worldwide. Meanwhile, the world is moving away from using coal for steel production and ghg free methods are starting to be implemented. Also, because the coal seam in Telkwa is associated with coalbed methane, there is a possibility of substantial methane releases during the mining of the coal. In order to determine the total greenhouse gas impact of this project, the dAIR should require a full review of all releases throughout all stages of development, production, transportation and use. RECOMMENDATION: That the AIR require sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also requires information as to whether there are alternatives to using coal in steelmaking that will produces less harmful effect on the environment.	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.

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IR-01-165-i	What Matters In Our Valley, Telkwa, BC	9. Air – Dust So far, air quality issues have not been addressed in any significant way. As news from Sparwood, B.C. establishes, running a coal mine can produce a significant amount of coal dust: http://www.cbc.ca/news/canada/british-columbia/sparwood-teck-coal-mine-1.4696904 https://www.thefreepress.ca/news/teck-to-compensate-sparwood-residents-for-dust/ Sources include blasting, as well as dust blown off waste piles and trucks and while loading and operating railroad cars. So far, we have not heard any significant discussion about how the dust would be controlled at the Telkwa mine site itself. In regards to transportation from the mine to the loadout by truck and from the loadout to the port by train, Telkwa Coal has referred to covering the product with some form of latex material, but there are no details. Even with such a system, coal dust from rail cars can still be a problem: https://www.columbiavalleypioneer.com/news/coal-dust-escaping-rail-cars-spurs-b-c-petition/ The Bulkley Valley already suffers from poor air quality. Our average PM 10 is also a problem, mostly from road dust in the spring. How will the blasting, processing, transportation and storage of the coal impact our air quality, especially given that the mine site is generally upwind from Telkwa and Smithers? RECOMMENDATION: That Air Quality should be treated as a Valued Component and the dAIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, the review should take place with the objective of preventing any further degradation of air quality.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements (AIR) sections 4.1 and 13.0). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance.
IR-01-165-j	What Matters In Our Valley, Telkwa, BC	10. Noise - Amount/Distance Obviously, between blasting and heavy truck traffic, the mine and loading operations will produce a significant amount of noise. So far, it appears that the only studies about how much noise will be produced are based on computer simulations. Together with the environment, the quality of life issues valued most by area residents focus on our quiet rural lifestyle (see Regional District Rural Official Community Plan Survey results, 2012). RECOMMENDATION: That noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed using methods that reasonably reflect real life conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements (AIR) , these will be covered in sections 4.1, 4.8 and 8.0).

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IR-01-165-k	What Matters In Our Valley, Telkwa, BC	11. Load Out – Flood Plain/ Haul Road impact According to the Regional District map, the proposed loadout facility site is on a Bulkley River floodplain. From personal experience, we know that this site is subject to flooding from the River. So, the potential is there for flood waters to wash stored coal into the Bulkley. Tenas Coal's plan is to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas Coal intends to store the wash coal on the ground, this land will be polluted for years and the only way to clean it will be to remove the soil. The haul road's planned path crosses the Helps Creek wetlands watershed for 7 km. We think this wetland and creek should be getting the same consideration asTenas, Four and Goathorn Creeks. Our concerns here, in addition to the impact on caribou, are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek. As noted in the Caribou section, the haul road is also directly inconsistent with one of the main objectives of the Caribou recovery plan, which is to eliminate and not expand linear disturbances and to allow the herd to use the lower elevation forests in an undisturbed fashion. RECOMMENDATION: That the dAIR include a requirement for a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(1/2) As described in the draft Application Information Requirements (draft AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan.
IR-01-165-k	What Matters In Our Valley, Telkwa, BC		(2/2) Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd. The dAIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the agricultural land reserve.

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IR-01-165-l	What Matters In Our Valley, Telkwa, BC	12. Recreation/Life Style impact Recreation is mentioned under the VC for land and resources. Outdoors recreation is one of the main features of the quality of life which Bulkley Valley residents value. The Hunters Basin/Hankin Plateau area is important to horseback riding and hiking enthusiasts. The mine site sits on top of the only access road into these areas. Will access be protected? RECOMMENDATION: That the dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a considered as subcomponent under the Land and Resource Use Valued Component (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in infrastructure and services (draft AIR section 6.3). The application of mitigation measures is part of the environmental assessment process, and will be considered accordingly in TCL's Environmental Assessment (EA) Application, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of the EA Application. In advance of the EA Application submission, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in TCL's EA Application subject to government requirements (section 13.0).
IR-01-165-m	What Matters In Our Valley, Telkwa, BC	13. Telkwa Coal Ltd. Finances and Bond Allegiance Coal, the company behind the Tenas Project, is a thinly capitalized Australian company with a weak financial position. The following information publicly available as of 2020-6-23 shows Allegiance Coal trading at a price of 7 cents per share, and that it has a market capitalization of only 40.28 million ASD, cash on hand of only 1.43 million ASD, with a debt of 2.32 million ASD, and a negative cash flow of 1.86 million ASD over the twelve trailing months. It has never operated a coal mine. If there were an accident or malfunction at the mine, or if an accidental release from the containment area occurred after the mine entered its reclamation and post-closure phase, then a reasonable question is: what resources are available to minimize the environmental and social impacts of the possibility of the company's inability to pay? RECOMMENDATION: • The AIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. • All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.

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IR-01-165-n	What Matters In Our Valley, Telkwa, BC	14. Jobs and Economic Opportunities The dAIR refers to the jobs that would be created through the coal mine project. However, much of the economic opportunities that have arisen in the Bulkley Valley during the last few years have come from such sources as tourism, recreation, amenity migration, home construction and real estate. All of these sectors depend in whole or in part on the preservation of a lifestyle connected to nature and natural beauty. The introduction of an open pit coal mining operation with its associated noise, dust and effects on the natural world will obviously have some negative effects on these economic sectors. For instance, what impact will it have on property values, air and noise pollution and the fishing based tourism economy? RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4) . Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (draft AIR section 6.5).
IR-01-165-o	What Matters In Our Valley, Telkwa, BC	15. UNDRIP BC has adopted the principles of the UN Declaration on the Rights of Indigenous People. Those principles are applicable here since the mine site sits on the territory of the Wet'suwet'en people. RECOMMENDATION: All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the Office of the Wet'suwet'en have set out for us.
IR-01-166	Maryann Emery, Golden, BC	I am strongly opposed to the Telkwa Mine. We are already seeing the devastation caused by mining in the Elk Valley. Now this plan dooms more of the environment and fish to destruction as the rivers are poisoned. Please, stop this endless destruction for coal, an outdated and polluting source of energy and a great contributor to climate change. Do the right thing this time...no mine!	Your perspective is noted. The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As described in the draft AIR sections 4.0 to 14.0, the topics raised will be addressed in TCL's EA Application. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

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IR-01-167-a	Nancy, Telkwa	(1/2) All people living in Telkwa, the Bulkley Valley and throughout the NW value and enjoy a quality of life in large part due to the natural environment and the capacity for that environment to meet the needs of humans and all living things. We must do our best to ensure that those things we value most are protected for all future generations. 1. I value clean water- we must ensure that water be treated as a Valued Component in the dAIR. • That water be treated as a Valued Component and not just an Intermediate component. That, due to the highly vulnerable state of our rivers and fish populations, as well as the great uncertainties connected due to climate change, the precautionary principle be applied to insure against alterations in water quality, flow, temperature and other key factors affecting the river, the fish, water sources and the watershed in general.	The purpose of the draft Application Information Requirements (AIR) is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the AIR, we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The study area boundaries for Fish/Fish Habitat/Aquatic Resources and Water Quality /Quantity were selected to capture the topographic area, to which potential downstream effects of the project may extend, the reasonable area addressed by literature reviews, the inclusion of long-term monitoring nodes, and areas in which cumulative effects considerations may apply overall. The upstream boundary is within the Telkwa River watershed, and the downstream extent captures the furthest monitoring node on the Bulkley River. The study areas include the Bypass Road and the Helps Creek and tributary crossings. Based on this, the local and regional study area boundaries have been adjusted slightly (enlarged downstream) and these will be presented in the final version of the AIR. Water chemistry differs within each of the watercourses and there are seasonal guideline exceedances of some parameters (e.g., metals) under background conditions (i.e., natural variability). We intend to utilize the best available science related to water quality considerations and bioaccumulation in fish tissue. Our team of experts will consider the derivation and rationale associated with existing water quality and fish tissue guidelines, bioaccumulation potential, and their suitability for the protection of aquatic resources and human health. These experts will contribute to, and review the relevant aspects of the effects assessments in TCL's EA Application.
IR-01-167-a	Nancy, Telkwa	(2/2) • • Boundaries- Study areas for components that could affect fish, such as Water Quality and Vegetation (i.e., wetlands), include portions of Bulkley River that are not then included in the Fish and Fish Habitat impact assessment. We request that spatial assessment boundaries be revised such that all possible effect pathways are fully encapsulated. Additionally, we request that spatial boundaries generally include a more significant portion of the Bulkley River, which is omitted in relation to many aquatic components despite it being an important waterway to local communities and tributary to the Skeena River, and that impacts be predicted to Helps Creek, which is also mostly omitted in the dAIR despite Project infrastructure being built across it. • • Fish - Science-based effect thresholds are used – fish are highly susceptible to adverse chronic effects of elevated metals in the surrounding environment and in their tissues. Provincial guidelines related to water quality, sediment quality, and fish tissue metals content do not cover all potentially harmful contaminants (especially regarding tissue metals), and may not always be stringent enough to protect the most sensitive species from sublethal effects; effect thresholds to fill these gaps can often be found in the scientific literature. We request that the impact assessment involve a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed	

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IR-01-167-b	Nancy, Telkwa	(1/2) 2. Water is required for all living creatures. Water must be managed to protect the fish. With climate change, fluctuations in precipitation are guaranteed- from drought to flash floods. Water use and fluctuations must be completely looked at in the dAIR. Water will be required as a water cover for PAG in perpetuity if we are to ensure the survival of the fish and other living creatures in the entire watershed. • Water cover over the PAG must be maintained for the life of the mine and beyond. Ground water will undergo normal seasonal and precipitation-event variability, as well as longer term climate warming and mining linked changes. To avoid accelerating the generation of ARD the company will have to respond to short and long term groundwater reduction events, for example drought, that would allow the PAG to become exposed to oxygen. If TC were to extract water from the rivers to maintain that cover they will change the rivers' flows, intensity and perhaps temperature, which will complicate management of the water.	The draft Application Information Requirements (AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx As identified in the draft AIR, surface water (section 4.3) and groundwater (section 4.4) are components of TCL's Environmental Assessment (EA) Application with their subcomponents of quantity and quality. As well, fish and fish habitat (draft AIR section 4.6) are included as components in TCL's Environmental Assessment (EA) Application. These chapters will be presented in the EA Application along with a water balance. The water balance model will account for climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds (see draft AIR section 13.0) will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses will be considered to further strengthen the positive water balance for the water covers.
IR-01-167-b	Nancy, Telkwa	(2/2) • The company must provide information about droughts, such as estimates of the probability of them occurring, their strength, their length, how those characteristics will change with climate warming. Provide uncertainties in the estimates. What are their contingencies to deal with unexpected droughts? • Maintaining the stocks of fish in the Telkwa and Bulkley rivers is a basic concern. To do so the quality, quantity and temperature of the river water must all, simultaneously, remain within limits that favour fish both routinely and during a water event. • RECOMMENDATION: The dAIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa C0al provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	

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IR-01-167-c	Nancy, Telkwa	3. How is it that Telkwa Coal is allowed to promote a large coal mine to investors but provide to the EAO info on a much smaller mine? • The EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. While no additional production is planned with certainty in the foreseeable future, as with all mines, exploration and/or optimization studies are ongoing and amendments to the rate (up or down) may be contemplated based on exploration and/or optimization results. Any amendments, including an increase in production rate, will be subject to the *Environmental Assessment Act* for amendments or separate environmental assessments if exceeding thresholds in the Reviewable Projects Regulations and would include indigenous and public engagement.
IR-01-167-d	Nancy, Telkwa	4. One of my greatest concerns is the potential for ARD and metal leaching. The geography is fractured and faulted- maintaining a water cover is experimental at best. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	Per section 4.3 of the draft Application Information Requirements (draft AIR), TCL's Environmental Assessment (EA) Application will include an evaluation of the Metal Leaching (ML)/Acid Rock Drainage (ARD) potential of all mine materials and influences of ML/ARD on surface water quality. The ML/ARD assessment will be consistent with provincial guidance documents including the Guidelines for Metal Leaching and Acid Rock Drainage at Mine Sites in British Columbia (BC EMPR 1998) and industry best practices. The ML/ARD Management Plan will be presented in section 13.0. A geochemistry baseline report will also be submitted with TCL's EA Application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application a geotechnical analysis of the management ponds will be provided and water balance will also be completed to show that structures can maintain a water cover.

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IR-01-167-e	Nancy, Telkwa	.5. My quality of life is based on being outdoors; outdoor recreation, peace and quiet and the beauty of the natural environment. People come from all over the world to enjoy this unique and beautiful part of the world. Air quality is already a health issue in the valley. Any negative impact on air quality, noise, recreation and natural beauty would negatively affect jobs and economic opportunities. • RECOMMENDATION: Air Quality should be treated as a Valued Component and the AIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, that the review take place with the objective of preventing any further degradation of air quality. • RECOMMENDATION: noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed under conditions that reasonably reflect conditions that occur in the Bulkley Valley • RECOMMENDATION: The dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected. • RECOMMENDATION: The dAIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities (section 4.1). Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance. We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Regarding noise, baseline measurements have been conducted in the vicinity of minesite and rail infrastructure and modelling will be conducted with an approved software to predict potential noise effects from noise generating activities from the project. Noise is a pathway and potential effects will be assessed in the human health (8.0) and wildlife (4.8) sections. Per the draft AIR, comments pertaining to potential economic effects will be addressed in the socio-economic (sections 5.0 and 6.0) and other chapters of TCL's Environmental Assessment (EA) Application.

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IR-01-167-f	Nancy, Telkwa	6. The load out is on a flood plain and in the ALR and the haul road is on wetlands • RECOMMENDATION: There will need to be a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	As described in the draft Application Information Requirements (draft AIR), sections 4.0 to 14.0 will address topics listed. The terrain assessment is section 4.2 while the Effects of the Environment on the Project is section 10 and will consider flooding. Project design section 1.3 will also consider flooding potential and terrain stability in the placement of coal stockpiles. Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (VC), see section 4.7 of the draft AIR. The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The draft AIR includes that soil quality will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the agricultural land reserve (ALR). We will seek non-farm use on ~50 ha of ALR, and we will adhere to conditions set out by the Agricultural Land Commission (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner, given the mixed land uses, this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan.
IR-01-167-g	Nancy, Telkwa	7. Allegiance is a junior company without experience or proper financial backing. • RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Inquiries will be addressed in the socio-economic (draft Application Information Requirements [AIR] sections 5.0 and 6.0) and other chapters of TCL's Environmental Assessment (EA) Application. Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is a requirement of our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required by the Government of British Columbia to post a financial reclamation bond prior to mining.

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IR-01-167-h	Nancy, Telkwa	8. Caribou matter!! Are we giving up on maintaining a natural environment where the caribou will survive? • RECOMMENDATION: The AIR should require an assessment of the likely impact on the success of the recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Coal Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape), it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, the caribou assessment (draft Application Information Requirements [AIR] section 4.8) will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program. The technical approach to assess effects on caribou was developed through a technical subworking group consisting of federal and provincial government biologists, and the consulting professional biologists tasked with the baseline and effects analysis. The subworking group was involved in the development of the methods to be used for analyzing potential effects through each indicator, as listed in the draft AIR, using a range of existing data, including 20 years of telemetry and mortality data, and the cumulative existing and reasonably foreseeable disturbance footprints in the area.
IR-01-168	Anonymous, Smithers, BC	(1/2) I live in the Bulkley Valley outside Smithers B.C.. I would like to support and adopt the Comments made by the group What Matters in Our Valley which is made up of residents of the Bulkley Valley like me. Those Comments are attached. Additionally, I would like to note that it is quite disturbing that the Environmental Assessment Office and the Provincial government would allow this process to go forward when the proponent itself admits that its real intention is to operate a mine almost twice as large in volume as the one it describes in its application. The proponent should not be allowed to engage in this form of charade. Once they start to "ramp up", at what point do they have to file a new application? Can they increase their production gradually and avoid an honest review entirely? All of the effects of the mine will change with an increase in operations. So, how can a reliable review be done on this application when it does not reflect even the most elementary facts about the scope of the project?	Please see our replies to the What Matters in Our Valley Comments below. Mine proposals in BC must undergo review under various legislation in addition to the *Environmental Assessment (EA) Act* . The *Mines and Environmental Management Acts* require more detailed technical information compared to the EA. BC refers to this as the Regulatory Continuum. We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Any amendments, including an increase in production rate, will be subject to the Environmental Assessment Act for amendments or separate environmental assessments if exceeding thresholds in the Reviewable Projects Regulations, and would include indigenous and public engagement. The draft Application Information Requirements (AIR) does not go into specific details about how the

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IR-01-168	Anonymous, Smithers, BC	(2/2) The application should be rejected at this stage on that basis alone. Similarly, the dAIR contains almost no detail about how the proponent intends to address the impacts to Valued and Intermediate Components, as well as other vital issues. So far, it has been left to Community Groups to start the process of identifying and exploring the specific technical challenges. The vagueness and generalities in the dAIR make it very difficult to comment on the information that will be needed to determine the merits of this proposal. Unless resources are provided for the Community to retain the types of expertise that is required for an objective, science based review, the application should be rejected at this stage because it does not meet even the most basic requirements of outlining the information that will be needed. Given the above, the project should not have been allowed to reach even this stage in the first place. Document Attached: WMIOV Comment on the dAIR Final.pdf	The draft Application Information Requirements (AIR) does not go into specific details about how the assessment will be conducted as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx Your comment relates to information that will be available in TCL's EA Application. The request for information from this commenter is covered off in detail by provincial government permitting requirements. A link to the Joint Application Information Requirements for *Mines Ac*t and *Environmental Management Act* is here: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/mineral-titles/permitting/2019_09_24_joint_application_information_requirements.pdf
IR-01-168-a	Anonymous, Smithers, BC	(1/2) 1. Size Matters When Telkwa Coal first proposed this project, it stated that its plan was to develop an open-pit coal mine producing 240,000 tonnes of coal per annum (tcpa) of product. This production level happened to be just under the then existing Provincial Environmental Assessment threshold of 250,000 tcpa. WMIOV and others complained to the Ministry about what seemed to be a transparent attempt to get around the EA process. Telkwa Coal then revised its proposal and submitted a draft mine plan identifying the mine project's objective to be 750,000 tcpa. However, since then, in its public statements to the business community contained in its Corporate Reports, Telkwa Coal has repeatedly stated that its true objective is to "ramp up" to 1.35 million tonnes per year. (See, e.g. Allegiance Coal (Telkwa Coal's Corporate parent) Corporate Presentation, May 2020, p. 8.)	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to

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IR-01-168-a	Anonymous, Smithers, BC	(2/2) Despite this, the Environmental Assessment office continues to review this proposal as if it were for a mine producing at the 750,000 tcpa level. So which is it? If 1.35 million tonnes, it simply does not make sense for the Environmental Assessment to take place based on misinformation about the scope of the project. Size matters because it affects all of the potential environmental and social impacts. Just as one example, while Telkwa Coal currently describes its proposed water usage for cleaning coal as 15,000 litres per hour, under the 1.35 million tonne scenario, usage would have to be almost twice that. What effect will this have on toxins, water runoff, water sources, capacity to control acid rock drainage (ARD) and cumulative effects? RECOMMENDATION: That the EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.
IR-01-168-b	Anonymous, Smithers, BC	(1/2) 2. Water and Fish Water - The dAIR relies on what are known as Valued Components (VC). These are the attributes and potential areas of concern that are most important in judging the mine proposal's merits. Surprisingly, Water is not identified in the dAIR as one of the Valued Components. Instead, it is considered an Intermediate Component (IC). ICs can be ignored in the final analysis, as long as the VCs they are related to (in this case fish) are sufficiently protected or, even if there are ill effects, those effects can be adequately mitigated. In other words, as long as there are not unacceptable risks to the fish or if mitigation is possible, then protecting water will not be a priority under the current dAIR. Water has both high societal value and high ecological value and therefore should be selected as a Valued Component as part of this Environmental Assessment, and not just as an Intermediate Component. Our rivers and our water quality are of immense historical and cultural importance to the people of the Bulkley/Wetzinkwa Valley. The attempt to diminish that importance in the review of this project is frankly surprising, especially given the quite serious risks the project poses to these treasured parts of our heritage.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project Environmental Assessment Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these

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IR-01-168-b	Anonymous, Smithers, BC	(2/2) Fish – The boundaries for review under the dAIR are limited to the Telkwa and a short stretch of the Bulkley just down stream from the confluence. Given the importance of the rivers and the fish, as well as the significant threats that already exist to fish survival, this seems quite inadequate. In addition, while the dAIR refers to relying on current science-based thresholds for contaminants that pose a risk to fish, those thresholds may not be sufficient to actually protect fish stocks. Our fish runs are already imperilled. Levels of heavy metals in the Telkwa are already significant. We suggest that the impact assessment include a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed. RECOMMENDATIONS: • That Water be treated as a Valued Component in the dAIR. • That the boundaries set for analysis of adverse effects include the entire Skeena system. • That the precautionary principle be applied due to the pre-existing threats to fish survival. • That the AIR call for a review of the latest scientific literature and analysis to help determine appropriate thresholds for fish toxicity, including sub-lethal effects.	key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) Project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .

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IR-01-168-c	Anonymous, Smithers, BC	3. Water Usage - Rivers, Creeks and Underground Sources A coal mine of this nature requires the use of large volumes of water for washing the product (as noted above, according to Telkwa Coal 15,000 litres per hour at the 750,000 tonne per year production rate). The washing of the coal will take place alongside the mine site. Telkwa Coal claims that it hopes to obtain enough water from the neighbouring creeks, runoff and underground sources to meet its needs in this regard. If not, it will draw from other sources in the Regional District. We assume this means the Telkwa River because what other nearby sources are there? Neighbours are also concerned that the use of underground sources will deplete the wells they rely on for their household water supply. RECOMMENDATION: The AIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa Coal provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	The draft Application Information Requirements (AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As identified in the draft AIR sections 4.3 and 4.4, surface water and groundwater are components of the TCL's EA Application, with their subcomponents of quantity and quality. As well, fish and fish habitat are included as components in TCL's EA Application (draft AIR section 4.6). These chapters will be presented in TCL's EA Application, along with a water balance. The water balance model will consider climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses have been included to further strengthen the positive water balance for the water covers.
IR-01-168-d	Anonymous, Smithers, BC	(1/2) 3. Acid Rock Drainage and Metal Leaching a. Tailings Impoundment - Separation of Materials Telkwa Coal acknowledges that its operations will produce significant quantities of Potential Acid Generating (PAG) materials. PAG results in Acid Rock Drainage if exposed to the elements. There is also a substantial risk of leaching of heavy metals. Heavy metals are highly toxic to fish. To prevent ARD, Telkwa Coal must separate PAG from non- PAG and then remove the PAG from contact with the environment forever. Telkwa Coal's current plan is to create a containment pond or ponds alongside the mine and place the PAG material and other toxic sources into this containment area and cover it with water. The resulting tailings impoundment(s) will cover an area about 1/2 the size of Tyhee Lake and about 40 metres deep. To carry out this plan, Telkwa Coal must separate the PAG material and the non-PAG material. The PAG material would then be submerged in the containment areas and the non-PAG material would be piled alongside the mine pit and impoundment areas.	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's EA Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid

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IR-01-168-d	Anonymous, Smithers, BC	(2/2) However, according to one of the reviewers during the similar Manalta project in the mid-1990's, it is highly unlikely that such a separation process could work. Even if the separation could occur, it would take a considerable amount of time for this to take place. What happens to the acid generating material in the meantime since, as soon as the material is exposed to the environment it starts acidifying and, thus, creating polluted runoff? b. Tailings Impoundment - Containment Plan Once the Acid Rock generating material is submerged in a containment lake, it must be preserved there forever. Reviewers during the Manalta process thought that, given the topography and underlying geology of the area, including the faults and fractures that exist there, it is unlikely that the impoundment would successfully retain the ARD material and/or heavy metals. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of the application. A geochemistry baseline report will also be submitted with TCL's EA Application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-168-e	Anonymous, Smithers, BC	(1/3) 5. Water Treatment - Heavy Metals and other Toxins The mine area contains heavy metals which are toxic to fish. In addition to Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc, there is an open question about the amount of selenium that will be produced. During the Manalta process, the reviewers concluded that the amount of selenium would be below Provincial threshold levels. However, since that time, the thresholds have been lowered due to findings about fish toxicity. a. Removal of heavy metals and other toxins The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the Province. We know from the experience at the Teck mines in the Elk Valley that even the most advanced and expensive technology for removing selenium does not work. Telkwa Coal proposes to treat water runoff from its operations by cleaning it to a point where it supposedly does not pose a risk to the river and the fish and then to pipe it to the Telkwa River for discharge. Will it be possible to successfully treat and clean the runoff?	The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project. Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to

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IR-01-168-e	Anonymous, Smithers, BC	(2/3) b. Discharge to Telkwa River Even if Telkwa Coal could successfully clean the runoff, how will dumping it into the Telkwa affect water temperature, water flow and other factors critical to water quality and the fish? The proposed project would discharge mine impacted water directly to the Telkwa River. Sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these metals would cause further exceedance of BC WQGs in the Telkwa and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water. c. Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved materials that are present. There are many industrially proven methods for treating mine contact water of this nature to remove dissolved species.	occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements. As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .
IR-01-168-e	Anonymous, Smithers, BC	(3/3) RECOMMENDATIONS: • Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. • Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. • Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	

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IR-01-168-f	Anonymous, Smithers, BC	6. Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this may be relevant for the Tenas project is in PAG material handling. Pit capacity must be available at the same time as PAG material is generated in order to avoid temporary surface storage. RECOMMENDATION: That Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.
IR-01-168-g	Anonymous, Smithers, BC	7. Caribou The Telkwa Caribou herd is listed under the Species at Risk Act and is identified as at threat of imminent extirpation. The herd is currently at approximately 34 animals. To prevent extinction of the herd, a Wildlife Management Area was recently created in the Telkwa Mountains. The long term goal is to restore a mature forest with limited disturbances in the form of logging, road building and further habitat destruction. The Telkwa Coal Mine location is almost completely within the Telkwa Caribou Wildlife Management Area. It will result in a removal of a substantial area of re-growing forest and create a haul road that will cross a part of the recovery zone. Coal hauling trucks will pass along this road somewhere between every 5 and 10 minutes. The establishment of the mine is inconsistent with the Caribou recovery plan and will prevent the return of undisturbed mature forests in the area. As a consequence, it will put further pressure on a herd that is already on the brink just as it starts to recover. RECOMMENDATION: That the AIR should require an assessment of the likely impact on the success of the Caribou recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-168-h	Anonymous, Smithers, BC	8. GHG Emissions – Full cycle including methane and alternatives While Telkwa Coal identifies this project as intended to produce coal for steelmaking (metallurgical coal) and not for energy production (thermal coal), this does not resolve the question of its effect on greenhouse gas emissions. 90% of the CO2 contained in metallurgical coal is released during the steel making process. Steel making itself is responsible for somewhere between 5 and 10% of total greenhouse gas emissions worldwide. Meanwhile, the world is moving away from using coal for steel production and ghg free methods are starting to be implemented. Also, because the coal seam in Telkwa is associated with coalbed methane, there is a possibility of substantial methane releases during the mining of the coal. In order to determine the total greenhouse gas impact of this project, the dAIR should require a full review of all releases throughout all stages of development, production, transportation and use. RECOMMENDATION: That the AIR require sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also requires information as to whether there are alternatives to using coal in steelmaking that will produces less harmful effect on the environment.	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of the Environmental Assessment (EA) Application (draft Application Information Requirements [AIR] section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.

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IR-01-168-i	Anonymous, Smithers, BC	9. Air – Dust So far, air quality issues have not been addressed in any significant way. As news from Sparwood, B.C. establishes, running a coal mine can produce a significant amount of coal dust: http://www.cbc.ca/news/canada/british-columbia/sparwood-teck-coal-mine-1.4696904 https://www.thefreepress.ca/news/teck-to-compensate-sparwood-residents-for-dust/ Sources include blasting, as well as dust blown off waste piles and trucks and while loading and operating railroad cars. So far, we have not heard any significant discussion about how the dust would be controlled at the Telkwa mine site itself. In regards to transportation from the mine to the loadout by truck and from the loadout to the port by train, Telkwa Coal has referred to covering the product with some form of latex material, but there are no details. Even with such a system, coal dust from rail cars can still be a problem: https://www.columbiavalleypioneer.com/news/coal-dust-escaping-rail-cars-spurs-b-c-petition/ The Bulkley Valley already suffers from poor air quality. Our average PM 10 is also a problem, mostly from road dust in the spring. How will the blasting, processing, transportation and storage of the coal impact our air quality, especially given that the mine site is generally upwind from Telkwa and Smithers? RECOMMENDATION: That Air Quality should be treated as a Valued Component and the dAIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, the review should take place with the objective of preventing any further degradation of air quality.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements [AIR] sections 4.1 and 13.0). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance.
IR-01-168-j	Anonymous, Smithers, BC	10. Noise - Amount/Distance Obviously, between blasting and heavy truck traffic, the mine and loading operations will produce a significant amount of noise. So far, it appears that the only studies about how much noise will be produced are based on computer simulations. Together with the environment, the quality of life issues valued most by area residents focus on our quiet rural lifestyle (see Regional District Rural Official Community Plan Survey results, 2012). RECOMMENDATION: That noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed using methods that reasonably reflect real life conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements (AIR), these will be covered in sections 4.1, 4.8 and 8.0).

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IR-01-168-k	Anonymous, Smithers, BC	11. Load Out – Flood Plain/ Haul Road impact According to the Regional District map, the proposed loadout facility site is on a Bulkley River floodplain. From personal experience, we know that this site is subject to flooding from the River. So, the potential is there for flood waters to wash stored coal into the Bulkley. Tenas Coal's plan is to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas Coal intends to store the wash coal on the ground, this land will be polluted for years and the only way to clean it will be to remove the soil. The haul road's planned path crosses the Helps Creek wetlands watershed for 7 km. We think this wetland and creek should be getting the same consideration asTenas, Four and Goathorn Creeks. Our concerns here, in addition to the impact on caribou, are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek. As noted in the Caribou section, the haul road is also directly inconsistent with one of the main objectives of the Caribou recovery plan, which is to eliminate and not expand linear disturbances and to allow the herd to use the lower elevation forests in an undisturbed fashion. RECOMMENDATION: That the dAIR include a requirement for a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(1/2) As described in the draft Application Information Requirements (AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan.
IR-01-168-k	Anonymous, Smithers, BC		(2/2) Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, TCL's EA Application will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd. The dAIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the ALR.

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IR-01-168-l	Anonymous, Smithers, BC	12. Recreation/Life Style impact Recreation is mentioned under the VC for land and resources. Outdoors recreation is one of the main features of the quality of life which Bulkley Valley residents value. The Hunters Basin/Hankin Plateau area is important to horseback riding and hiking enthusiasts. The mine site sits on top of the only access road into these areas. Will access be protected? RECOMMENDATION: That the dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a considered as subcomponent under the Land and Resource Use Valued Component (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in infrastructure and services (draft AIR section 6.3). The application of mitigation measures is part of the Environmental Assessment process, and will be considered accordingly in the assessments, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of TCL's Environmental Assessment (EA) Application. In advance of TCL's EA Application, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in TCL's EA Application subject to government requirements (section 13.0).
IR-01-168-m	Anonymous, Smithers, BC	13. Telkwa Coal Ltd. Finances and Bond Allegiance Coal, the company behind the Tenas Project, is a thinly capitalized Australian company with a weak financial position. The following information publicly available as of 2020-6-23 shows Allegiance Coal trading at a price of 7 cents per share, and that it has a market capitalization of only 40.28 million ASD, cash on hand of only 1.43 million ASD, with a debt of 2.32 million ASD, and a negative cash flow of 1.86 million ASD over the twelve trailing months. It has never operated a coal mine. If there were an accident or malfunction at the mine, or if an accidental release from the containment area occurred after the mine entered its reclamation and post-closure phase, then a reasonable question is: what resources are available to minimize the environmental and social impacts of the possibility of the company's inability to pay? RECOMMENDATION: • The AIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. • All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.

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IR-01-168-n	Anonymous, Smithers, BC	14. Jobs and Economic Opportunities The dAIR refers to the jobs that would be created through the coal mine project. However, much of the economic opportunities that have arisen in the Bulkley Valley during the last few years have come from such sources as tourism, recreation, amenity migration, home construction and real estate. All of these sectors depend in whole or in part on the preservation of a lifestyle connected to nature and natural beauty. The introduction of an open pit coal mining operation with its associated noise, dust and effects on the natural world will obviously have some negative effects on these economic sectors. For instance, what impact will it have on property values, air and noise pollution and the fishing based tourism economy? RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4) . Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (draft AIR section 6.5).
IR-01-168-o	Anonymous, Smithers, BC	15. UNDRIP BC has adopted the principles of the UN Declaration on the Rights of Indigenous People. Those principles are applicable here since the mine site sits on the territory of the Wet'suwet'en people. RECOMMENDATION: All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the OW have set out for us.
IR-01-169	Northwest Institute, Smithers	Documents Attached: 2020 July 23, Submission to EAO, 2020 July, 2020 July, Source Memo Tenas coal draft AIR	See separate response memo to Northwest Institute available on ePIC.

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IR-01-169-a	Northwest Institute, Smithers	This is a proposal for a mine with high potential for acid mine drainage and metal leaching that is close to a settled area of the province and close to the migration route of all species of Pacific salmon and steelhead. The connectivity between intended and unintended acid and metal runoff from the Tenas Mine and stream, river and groundwater flows is unknown. The community of Telkwa is less than ten kilometres away from the proposed mine and draws its drinking water from that interconnected water.	As part of TCL's Environmental Assessment (EA) Application, detailed hydrogeological, hydrological and mass transport models are being developed. These models will consider mass loadings from rock placed in the management ponds and will be used to evaluate the modelled change to water quantity and quality in downstream receptors (draft Application Information Requirements [AIR] sections 4.3, 4.4, 4.6). The model results will be assessed as part of a human health risk (draft AIR section 8.0) and aquatic effects (draft AIR sections 4.5, 4.6) assessments.
IR-01-169-b	Northwest Institute, Smithers	From previous attempts to justify coal mine at the Tenas site, we know that the distribution of acid-generating rock – both in the coal itself and in the waste rock that needs to be removed – is highly variable with numerous hotspots. This will require dense sampling to confirm that acid drainage and metal leaching information is such that the mine is financially and environmentally feasible before an environmental assessment certificate is granted. That informational density does not appear to be close to the level required.	The geochemistry studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been followed to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. The geochemistry report and Acid Rock Drainage/Metal Leaching Management Plan (section 13.0) is being prepared by registered professional geoscientists and will be reviewed by government geoscientists from the Ministry of Mines.
IR-01-169-c	Northwest Institute, Smithers	Many of the Bulkley-Morice salmon stocks migrate both downstream in the spring as emerging fry and upstream later in the year as spawning adults. Again, this significant salmon highway is less than ten kilometres from the mine. Acidity and metal runoff can not only cause mortality and morbidity in migrating salmon but sub-lethal levels can also hold up migrations causing later failure to spawn or adverse behaviour in juvenile fish.	A significant amount of time and energy has been invested in predictive modelling to understand the potential effects of mine design and mitigation measures on downstream water quality. The outcomes of the final modelling efforts for the chosen mine layout will be assessed to determine potential effects on fish and fish habitat, including aquatic resources. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft Application Information Requirements (AIR), these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's Environmental Assessment (EA) Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

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IR-01-169-d	Northwest Institute, Smithers	we consider the current draft AIR to be a preliminary document. Substantially more work needs to be completed by the proponent and by the EAO before it can be posted for public comment. The draft AIR is so poorly put together and so vague that neither the director, under s. 16(2) of the Environmental Assessment Act, 2002 (the "Act"), nor the public can be assured that an application for an environmental assessment certificate by the proponent based on the draft AIR would meet the requirement of s. 16 of the Act.1. This project is of significant public concern and the draft AIR for public review should be completed with sufficient professionalism so that a meaningful review of the document is possible. Therefore, we request that a revised AIR be prepared and there be an additional public review period following its posting on the EAO website. There is considerable interest in the proposed Tenas Project and several public interest groups like ourselves have contracted technical experts to assist with the screening and detailed review during the environmental assessment.	The Application Information Requirements (AIR) is a template document provided by the Environmental Assessment Office (EAO) to proponents as a framework for the information to be provided and is not intended to detail specific information. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC EAO, and the Proponents adherence to the AIR in a professional manner will be assessed by the BC EAO prior to accepting TCL's Environmental Assessment (EA) Application for review. We note that the document addresses the selection and assessment of valued components (VC) in line with BC EAO guidance, and is supported by the Section 11 Order, Project Description and Consultation Plans. For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The commenter may also be interested in the detail required by provincial government permitting requirements. A link to the Joint Application Information Requirements for *Mines Act* and *Environmental Management Act* is here: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/mineral-titles/permitting/2019_09_24_joint_application_information_requirements.pdf" The draft AIR will be updated based on comments from the Working Group, Indigenous groups and public comments prior to final approval by the BC EAO.
IR-01-169-e	Northwest Institute, Smithers	We request that groups' technical advisors be included in the Working Group for the EA review and permitting of the project. This approach would meaningfully consider the publics significant concerns with the proposed project. This comment is relevant to the draft AIR, Section 2.1. We also ask that a Community Advisory Committee (COC) be set up to include members of the public with an interest in the project. Such committees are mandated in the 2018 Environmental Assessment Act. While the Tenas Project is being reviewed under the old Act we believe it would be useful to establish a COC as a vehicle for sharing information and highlighting issues needing further consideration.	We are following the Environmental Assessment (EA) process as established by the BC Environmental Assessment Office (EAO). Technical Working Groups are a required part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board to address the technical aspects of the Project. In addition to this technical group, the local community and broader public have three formal opportunities for input in the EA process, and, as always, we welcome the opportunity to meet with community groups and members.
IR-01-169-f	Northwest Institute, Smithers	Based on the draft AIR (page 15), it would appear that the project is intended to proceed with concurrent permitting during the EA review. If so, could our group view the draft Information Requirements Table (IRT) for the permitting process and provide comment? If concurrent permitting is proceeding, the scope of the concurrent permitting of the project should be defined in order to meet the requirements of s. 16 of the Act.	The draft Information Requirements Table (IRT) is currently in development. The permitting process is administered by the Major Mines Permitting Office (MMO).

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-g	Northwest Institute, Smithers	2.1 Discharge to Telkwa River The proposed project would discharge mine impacted water directly to the Telkwa River rather than to smaller watercourses closer to the site such as Goathorn Creek, Tenas Creek or Four Creek. Larger rivers generally have more dilutive capacity than smaller creeks. However, sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these species would cause further exceedance of BC WQGs in the Telkwa River and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water. Source recommends that an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan.	Water quality and quantity and physical interactions with fish habitat are key elements of the aquatic effects assessment that will be conducted in support of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements [AIR] sections 4.3 to 4.6). The concerns being raised are specifically being addressed in detailed aquatic modeling. Water quantity and quality are being evaluated with respect to the projected conditions, and will consider a range of potential outcomes and water management strategies. Locations along the creeks and rivers are being modeled and evaluated. Discharge locations and timing will be subject to government requirements. Guidelines are scientifically-based, calculated values, intended to protect all aquatic communities. When values are higher than (exceed) a generic guideline, this does not necessarily mean there is an unacceptable risk to the environment. Rather, exceeding a guideline indicates that there is a need for additional site-specific assessments to determine the potential for environmental risk. We intend to use source control to minimize the volume and concentrations of elements that can ultimately end up into the receiving water courses. We will use mitigation measures as required. An alternatives assessment will be carried out for the discharge location.
IR-01-169-h	Northwest Institute, Smithers	2.2 Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The project description states that potentially acid generating (PAG) mine waste will be stored in saturated pits to prevent acid generation and reduce treatment requirements. However, even mine waste that does not go acidic can release environmentally significant levels of contaminants. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved species that are present. There are many industrially proven methods for treating circumneutral mine contact water of this nature to remove dissolved species. Source recommends that a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	We intend to use source control to minimize the volume and concentrations of elements that can ultimately end up into the receiving water courses. We will use mitigation measures as required and adhere to government regulation. Applicable BC Ministry of Environment guidance will be consulted.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-i	Northwest Institute, Smithers	2.3 Potential for Selenium Release The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the province. The project description for the Tenas Coal project simply states that “most” of the rock units in the project contain lower levels of selenium than other western Canadian coal projects. However, this does not mean that selenium is not a potential issue for the site, as even small amounts of selenium can have a significant environmental impact. Based on precedent at other sites in BC, the cost and complexity of selenium management can be significant and so should be accounted for at the early stages of project planning. Because of the clear precedent of coal mines in BC impacting watercourses and aquatic life with selenium, Source believes that the lack of any particular mention of selenium in the draft AIR is a significant oversight. Source recommends that a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan.	Geochemistry testing shows that selenium is lower in the rock in comparison to other mines in British Columbia and the potential for leaching at elevated concentrations is lower at the Tenas project. Ultra-low solid phase analysis of selenium was included in a supplemental geochemical characterization of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site showed that selenium was <0.0002 mg/L. A selenium bioaccumulation model will be developed to assess the potential for effects on local fish. This model will use data from our site baseline studies and water quality predictions, other relevant coal mining sites in British Columbia and Alberta; and, from peer-reviewed literature. We intend to have both a selenium bioaccumulation model and a Selenium Management Plan (nested under the Discharge Management Plan) in TCL's Environmental Assessment (EA) Application. For clarity, we will add these to the draft Application Information Requirements in section 4.3 and 13.0.
IR-01-169-j	Northwest Institute, Smithers	2.4 Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this is relevant to the Tenas project is in PAG material handling. PAG cell capacity must be available at the same time as PAG material is generated to in order to avoid temporary surface storage. Source recommends that Care and Maintenance be included as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Our Reclamation and Closure Plan (draft Application Information Requirements section 13.0) will have care and maintenance procedures. This is a permitting requirement. This plan will include management of Potentially Acid Generating material during potential periods of care and maintenance.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-k	Northwest Institute, Smithers	(1/2) 2.5 AMD Management Strategy and use of PAG Cells The project description describes the use of subaqueous storage of PAG material to avoid the onset of AMD. However, PAG material that is left on surface while PAG cell capacity is constructed will weather and may turn acidic before the material is disposed of. It is therefore important to minimize the amount of time that PAG material is exposed to air (i.e. temporarily impounded on surface outside PAG cells or impounded in PAG cells before water cover is introduced). A detailed schedule of PAG handling should be developed that accounts for volume of PAG material generated and volume of subaqueous storage capacity available year over year in the mine plan. This connects with the previous point on Care and Maintenance, as the planned method of handling PAG could fail if the mine goes into Care and Maintenance while PAG rock is left exposed to air rather than in subaqueous cells.	Geochemistry characterization studies for this project are extensive with several programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been followed and used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations (i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-k	Northwest Institute, Smithers	(2/2) To fully evaluate the adequacy of the proposed approach to PAG management, significantly more detail associated is required. Key components whose design directly relate to environmental effects include (but are not limited to) the open pits, PAG cells, surface waste rock dumps, and water management infrastructure. Information required to conduct such an evaluation varies by mine feature. For example, evaluation of pit suitability as PAG cells requires an understanding of pit geometry, dewatering infrastructure design, conceptual blasting plan, method(s) of converting pit(s) to PAG cells, and role of the pit in the overall water balance (i.e. ability to maintain water cover with or without additional water taking). For PAG cell designs that use water retaining dams, dam structures should be depicted with dam heights, slopes and foundations and construction materials should be identified with supporting evidence of their suitability for use in dam construction. Geotechnical analysis of water retaining structures (i.e. PAG cells) and their foundations should be provided (ex. geotechnical field investigation, associated laboratory work, sensitivity analysis, etc.). For surface waste rock dumps, detailed descriptions of waste rock dump geometry as well as construction method should be included. All the above material should be discussed to show the planned evolution of these mine features over the course of the mine plan and should not simply focus on the final build of each feature expected at closure. The above material should also all be cross referenced with the appropriate sections on geochemical assessment of the different materials (i.e. Metal Leaching/Acid Rock Drainage potential) to discuss the implications of the proposed designs on ML/ARD.	The mine will be operated according to the Metal Leaching/Acid Rock Drainage Management Plan (draft Application Information Requirements [AIR] section 13.0) currently being prepared. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. Kinetic testing was completed as part of the baseline geochemical characterization, which included an estimate of the lag time to the onset of acid generation. The results were variable based on the geochemical properties of each stratigraphic zone; however, the lag times were on the orders of years, not months. We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to aid in the development of a Mine Emergency Response Plan (section 13.0). The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0). The geotechnical analysis of the management ponds will be provided and water balance will also be completed to show that structures can maintain a water cover.

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IR-01-169-I	Northwest Institute, Smithers	2.6 Geochemistry Evaluation and PAG Inventory A key aspect of the proposed PAG management strategy is the estimate of the expected amount of PAG material and the criteria used to classify material as PAG or NAG. For example, if PAG is found in unanticipated locations or in greater amounts than anticipated then the PAG management strategy could be compromised. Significant information outlining the geochemical program for the project is required to evaluate this aspect of the program, such as details on the geochemical program that supports the estimate of PAG/NAG inventory (i.e. number and location of samples, geochemical testing methodology, results). Further, it is important to understand how representative the geochemical program is of waste rock as well as the coal bearing ore, for example by conducting a statistical analysis of geochemical sample locations to quantify the level of uncertainty in the PAG inventory estimate.	A detailed geochemistry characterization program has been conducted for the Project and includes sampling and testing of over 700 samples collected continuously from drillholes within the proposed boundaries of the open pit. The program includes testing of run of mine coal, processed and mined rock and was designed to be both spatially and compositionally representative of the deposit so that the results could be used to estimate volumes of Potentially Acid Generating (PAG) rock that will be produced during operations to inform PAG rock management strategies. Testing results have been used to define the PAG classification criterion. PAG rock has been defined for this Project for all material with a neutralization potential ratio (NPR) <2. The MEND (2009) Prediction Manual for Drainage Chemistry from Sulphidic Geological Materials indicate that mine materials with NPRs between 1 and 2 have uncertain acid generating potential. All material with NPRs between 1 and 2 in the Tenas Project have been conservatively characterized as PAG. The robustness of the geochemical characterization program has allowed us to establish the range in geochemical properties of stratigraphic units that will be encountered during mining and to pre-emptively characterize mined and processed rock as PAG or non-PAG for the purpose of mine planning (e.g., estimating volumes of PAG rock that will be produced during operations). The results will be presented in a baseline geochemistry report to be submitted with TCL's Environmental Assessment (EA) Application. A Metal Leaching (ML) / Acid Rock Drainage (ARD) Management Plan (draft Application Information Requirements [AIR] section 13.0) per the requirements of the Ministry of Energy, Mines and Low Carbon Innovation (EMLI) Joint EMA and MA permit applications will provide the framework for operationally characterizing PAG rock so it will be managed appropriately (i.e., placed in the management ponds). If implementation of the ML/ARD Management Plan results in different volumes of PAG rock as currently estimated, operations can increase or decrease storage capacity as needed.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-m	Northwest Institute, Smithers	2.7 Focus on AMD on Water Quality Impact The project description heavily references PAG and AMD as the main potential mechanisms for water quality impact by the project. However, even non-acidic mine contact water can be degraded in an environmentally significant way. Key contaminants of potential concern such as copper, cadmium, selenium, and sulphate can leach from minerals into contact water under circumneutral conditions. Nitrogen species released by explosive blasting can also impact water quality (ex. nitrate and ammonia). Coal mine impacted water can also contain elevated levels of dissolved carbon dioxide that can then impact aquatic habitat through deposition of calcite. While AMD is indeed an important mechanism for water quality degradation, all of the aforementioned phenomenon have precedent from other coal mining projects in BC and so should be evaluated for this project as well.	Parameters listed in comment will be evaluated in the water and load balance modeling for the Project. Nitrogen species released through blasting have also been incorporated using approved methodologies. Calcite saturation indices will be calculated to determine if calcite is supersaturated in the modelled solutions to determine if calcite has the potential to precipitate in site waters and discharge from the Project.
IR-01-169-n	Northwest Institute, Smithers	General comments: The evaluation of potential effects on surface water, groundwater and aquatic habitat necessitates use of conceptual models. The AIR should require that Conceptual Models be developed as clear, simple figures for the water balance, water quality load balance, hydrogeological inputs and the Site Conceptual Model for the ecological risks and contaminant pathways. The AIR contains no reference to requirements for water quality model predictions and water balance model predictions and the guidance documents on requirements. This is an important omission that needs to be amended.	Visual representation of the Conceptual Site Model is required for permitting, but we will also include as part of TCL's Environmental Assessment (EA) Application. A detailed water quantity and quality model is being prepared and results will be provided in the EA Application. These are referenced in the draft Application Information Requirements (AIR) in sections 4.3.1 and 4.4.1 and 4.4.2. Detailed results, the potential effects and proposed mitigations will be presented and described in detail in TCL's EA Application. As per the draft AIR aquatic Resources and Fish and Fish Habitat assessments are located in sections 4.5 and 4.6.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-o	Northwest Institute, Smithers	(1/2) 1.1 Project Phases: Section 1.1 of the draft AIR mentions project phases. The list of project phases should include Care and Maintenance, similar to Construction, Operations, Closure and Post-Closure. Care and Maintenance is an important phase of mine life in terms of evaluating potential environmental impact and should be considered given the actual industrial history of coal and metal mining in BC, where very few if any projects go directly from operations to closure with no interruption. Specific locations in the draft AIR where Care and Maintenance should be included as a specific phase include the following: • Page 25, section 3.4 • Page 32, section 4.1 • Page 33, section 4.1.1 • Page 39, section 4.2 • Page 40, section 4.2.1 • Page 43, section 4.2.3 • Page 45, section 4.3.1 • Page 52, section 4.4 • Page 57, section 4.5.1 • Page 63, section 4.6.1 • Page 69, section 4.7.1 • Page 75, section 4.8.1 • Page 87, section 5.1.1 • Page 91, section 5.2, 5.2.1 • Page 93, section 5.2.3 • Page 96, section 6.1.1 • Page 99, section 6.2.1	We recognize that the life cycle of a mine may include temporary closures and that attention to the care and maintenance of the mine during these periods is required. Our Reclamation and Closure Plan (draft Application Information Requirements section 13.0) will include care and maintenance procedures. This is a permitting requirement. As temporary closures are not planned activity, we consider that this approach provides for diligent management of the mine site and that a separate Project phase for temporary care and maintenance is not required.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-o	Northwest Institute, Smithers	(2/2) • Page 102, section 6.2.3 • Page 104, section 6.3.1 Page 108, section 6.4.1 • Page 114, section 6.5.1 • Page 118, section 7.1.1 • Page 124, section 8.1.1 The Care and Maintenance phase could align with the period during which there is the maximum amount of PAG material on surface exposed to air (rather than being disposed of sub-aqueously in PAG cells). This is important because the proposed plan describes PAG material would immediately be stored in flooded cells, but the mine entering Care and Maintenance would make this unlikely. The duration of a Care and Maintenance period should be set based on industrial history in BC (i.e. 10+ years) for the purposes of evaluation. Water quality and water balance modeling should be conducted for this project phase.	

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-p	Northwest Institute, Smithers	(1/2) 1.3 Alternatives Assessments: Section 1.3 of the draft AIR describes alternatives that were assessed in developing the project. Please add the following text for alternatives assessments in general: 1. Public consultation on the alternatives must considered the use of public resources such as water resources and dilution capacity. It is essential that the public be consulted on the use and potential alteration of public resources. 2. Environmental Impacts, feasibility, costs, community impacts, and health impacts: a. Please add: public comments, public perception of the compact nature or extent of the mine impacts, non-degradation goals for water quality and use of shared resources (i.e. water quality in waters of significant cultural and ecological significance) 3. Alternative means of carrying out the proposed Project that will be considered in the Application include: a. Please add: effluent discharge locations for all mine phases* b. Please add: effluent treatment technologies that are designed for effluent discharge locations c. Please add: NAG rock management plans d. Please add: closure mitigation plans for water quality e. Please add: nitrogen management plan One alternative assessment that is notably missing is the assessment for location for discharge of water and water treatment methods. These are critical aspects of mitigating risk to aquatic habitat and life. It is not permissible to use dilution as a replacement for Best Achievable Technology and mitigation planning.	We have assessed alternative means as a component of project planning and have developed a project description that includes measures to avoid and mitigate potential effects (mitigation-by-design). The list in the draft Application Information Requirements (AIR) includes project components where alternative means were assessed, and TCL's Environmental Assessment (EA) Application will provide the rationale for their selection. As noted in the draft AIR, the EA Application must provide the rationale and criteria used to select the proposed means of undertaking the Project. The criteria will include the technical and economic feasibility of the means, and the relative environmental, social, health and heritage effects of the means. As such, the criteria will include community, water quality and footprint effects noted in the comment. Public input on the alternative means assessment will considered through the consultation plan for TCL's EA Application review phase. Responses for the specific requests for inclusion as alternative means have been included in TCL's EA Application as noted below: a. "effluent discharge locations for all mine phases" will be covered under "Mined and processed rock management (Potentially Acid Generating (PAG)/ Non-Acid Generating (NAG) materials and water cover, discharge)" b. "effluent treatment technologies that are designed for effluent discharge locations" will be covered under "Mined and processed rock management (PAG/NAG materials and water cover, discharge)"

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-p	Northwest Institute, Smithers	(2/2) A larger receiver should not be chosen to avoid using treatment technologies that are the best achievable. An alternatives assessment for discharge location and water treatment methodology should be conducted in concordance with Ministry of Environment guidance on use of initial dilution zones and Best Available Technology. Specific to an water discharge alternatives assessment, please add the following text: • “The consultation on the alternatives must consider the use of shared public resources such as water resources, including the use of dilution capacity and alteration of water quality from current conditions.” Criteria to be used in assessing alternatives should include: • Public sentiment and perception of risk (i.e. not limited to proponent sentiment and perception of risk) • Maintenance of water quality (i.e. the goal of non-degradation of water bodies with significant cultural and ecological significance including the Telkwa River, Bulkley River and Skeena River) • Reduction of project footprint and returning contact water to the watercourses that it would otherwise report to (i.e. Tenas Creek, Four Creek and Goathorn Creek) Alternative Means of Carrying Out the proposed Project that will be considered in the Application: • Discharge Location • Discharge Treatment Technology • Waste rock management • Blasting techniques and nitrogen management	These will not differ for different locations. c. "NAG rock management plans" will also be covered under "Mined and processed rock management (PAG/NAG materials and water cover, discharge)" d. "closure mitigation plans for water quality" will be included in management plan section of TCL's EA Application e. "nitrogen management plan" will be included in management plan section of TCL's EA Application "Discharge location", "Discharge treatment technology" and "Waste rock management" are all covered under "Mined and processed rock management (PAG/NAG materials and water cover, discharge)". For "Blasting techniques and nitrogen management", techniques are included in mining method and nitrogen management in the explosives management plan included in section 13.0 of TCL's EA Application. We will consider the use of the provincial Technical Guidance under the *Environmental Management Act* for the Development and Use of Initial Dilution Zones for Effluent Discharge Authorization (Environmental Protection Division 2019) for assessment of environmental criteria for water quality. We note that permitting will require detailed consideration of these guidelines.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-q	Northwest Institute, Smithers	3.1 Selection of Valued Components: Surface waters should be a Valued Component (VC) along with Aquatic Resources. The designation of surface waters (quality and quantity) as an Intermediate Component (IC) is concerning and inconsistent with a number of other projects. Water and aquatic resources have intrinsic value and are not simply linked through fish and other VCs designated by the project. People experience water and feelings of safety in being able to drink water and travel in water without harm from industrial pollution. Water is a shared resource, not just fish habitat. It is inconsistent to designate forests, wetland and plants listed with vegetation as VCs but streams, creeks, rivers, and lakes as ICs. Surface waters should be considered a VC and surface water quality should be considered a subcomponent. Surface waters are “ultimate receptors” as much as wetlands and other VCs listed. In addition, it is concerning that an assessment of surface waters as an IC is not completed (to avoid redundancy). An assessment of surface waters is critical for the EA Application and must be conducted. Please add surface water quality to the table of VCs and please complete an assessment of potential impacts for this critical VC.	In response to feedback from the Office of the Wet’suwet’en (OW) and the public during the review of the draft Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using VCs only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-r	Northwest Institute, Smithers	3.3 Existing Conditions: Section 3.3 refers to existing conditions. As Surface waters (quantity and quality) are not included as VCs, many of these statements do not apply to surface water baseline data collection and analysis. Please correct this significant error in the draft AIR (see highlights below). It is critical to understand the following in relation to water: • An explanation of if and how other past and present projects and activities in the study area have affected or are affecting each VC; • Where additional project and VC-specific field studies are conducted, the scope and methods to be used will follow published documents pertaining to data collection and analysis methods, where these are available. Where methods used for the assessment deviate from applicable published guidance, the rationale for the variance will be provided in the Application; and • Description of what TEK, including Indigenous Traditional Knowledge, was used in the VC assessment. • The Application will contain the existing (or baseline) technical reports in the Appendices and will summarize key findings contained in these technical reports directly in the Application, in a manner that allows the reader to understand each VC's effects assessment. This error may apply to other ICs. In addition, this type of error may be important elsewhere in section 3.	We appreciate your comment. This is no longer relevant as we have changed our approach to only have Valued Components (VCs). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-s	Northwest Institute, Smithers	(1/2) 3.5 Mitigation Measures: This section does not adequately describe the process required for development mitigation measure for some VC/ICs including surface waters. It is necessary to define when mitigation measures are needed (and this has not been clarified). For example, public sentiment might be that mitigation measures should be developed if the water quality of the discharge (end of pipe) exceeds BC WQGs, not just when the proponent feels mitigations measures are required. This is not clear in the draft AIR and needs to be clarified. It is not the proponent's choice to develop mitigation measures for protection of a public resource like water quality in the receiving environment based on the proponent's values. Values of more diverse groups need to be considered including the public interests. The expectation is that mine water mitigation planning will respect the principal of avoidance of mine water discharge to water bodies with current conditions that exceed water quality guidelines. For example, the Telkwa River already exceeds water quality guidelines for some COCs. It is not acceptable to discharge additional load to a system that already has water quality exceedances, and this should be clarified through the initial stages of the project.	We are following the environmental assessment (EA) process, including public consultation, as led by the BC Environmental Assessment Office (EAO). The purpose of the Application Information Requirements (AIR) is to identify the general methods and types of information that are to be included in TCL's EA Application. While the details of specific mitigation measures are not described in the AIR they will be included in the EA Application for each component as necessary, including surface water quality. We will follow the BC Environmental Mitigation Policy which establishes a mitigation hierarchy. Ultimately, water quality in discharge from the Project will be regulated through an effluent discharge permit under the *Environmental Management Act* . The Best Available Technology Assessment will be finalized as part of the *Mines Act* Permit Application.
IR-01-169-s	Northwest Institute, Smithers	(2/2) Unfortunately, this key consideration has been missed in the project description and draft AIR; statements are made that current conditions exceed water quality, discharges are planned via pipeline to Telkwa River and no water treatment is contemplated. Discharge planning must consider requirements for water bodies of significant cultural and ecological significance (including sensitive fish species) and plan for non-degradation. The current approach of planning for discharge to a large receiver (via pipeline) with no mitigation (i.e. water treatment) is unacceptable and should be addressed via the expectation setting phase (i.e. the draft AIR). Section 3.5 neglects to refer to Best Available Technology and Discharge Alternative Assessments. In general, the section appears to reflect VC and ICs other than surface waters.	

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-t	Northwest Institute, Smithers	3.6/3.7 Characterization of Residual Effect and Determination of Significance: This section on methodology is very subjective and may lead to a biased result. It is important that Qualified Professionals (QP) completing this work clearly take ownership for their work for characterization of residual effect and for determination of the significance of the residual effect. For each determination, the Qualified Professional should need to state a commitment to independence of the proponent's preferences. The QP should seek to reach consensus through engagement with all QPs knowledgeable on the project and subject area. It should be possible to reach a collaborative, technical consensus, rather than have the appearance of bias in favor of favourable outcome for the proponent. For the determination of Confidence and Risk, the QP should consider the experience from existing coal mines in BC to verify the predictions.	We will follow the BC Environmental Assessment Office (EAO) *Guideline for the Selection of Valued Components and Assessment of Potential Effects* (2013) for the effects assessment. In addition to the guidelines, best management practices and the collective experience of the assessors from comparable assessments for similar projects will form the basis of the assessment. We have assembled a large team of qualified professionals to collaboratively complete the effects assessment, including significance determination of residual effects. The BC *Professional Governance Act* ensure that professionals in the various associations (College of Applied Biology [CAB], Association of Professional Engineers and Geoscientists of BC [APEGBC], Agronomists, etc.) have a high degree of integrity in serving and protecting the public interest in their respective disciplines.
IR-01-169-u	Northwest Institute, Smithers	3.8 Cumulative Effects Assessment: The definitive feasibility study for the project describes how the project was designed with the ability to expand from 145 t/h coal production rate to 350 t/h by adding equipment to the coal handling plant and/or by mining additional area currently under ownership by Telkwa Coal Limited (TCL). If TCL intends to potentially expand the project, this expansion should be included in the cumulative effects assessment for the application. The cumulative effects assessment should also consider the fact that the Telkwa River already contains levels of certain contaminants above water quality guidelines, as discussed in section 2.1 of this document.	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Any amendments, including an increase in production rate, will be subject to the *Environmental Assessment Act* for amendments or separate environmental assessments if exceeding thresholds in the Reviewable Projects Regulations, and would include indigenous and public engagement. The current water quality status of the Telkwa River will be considered in the existing conditions, Project-related effects and cumulative effects sections of the Water Quality component assessment per the draft Application Information Requirements (AIR) sections 4.3 and 4.4.
IR-01-169-v	Northwest Institute, Smithers	3.9 Follow-up Strategy: Each follow-up strategy should also include timelines for effects assessment, evaluation of mitigation efficacy, and implementation of additional measures. If mitigation measures fail or if unforeseen effects occur, it is important that effective mitigation measures are applied in a reasonable timeframe.	Follow-up Monitoring and Adaptive Management Programs (draft Application Information Requirements (AIR) section 14.0) will be implemented to monitor biophysical and socio-economic parameters (where applicable), and determine the efficacy of implemented mitigation measures.
IR-01-169-w	Northwest Institute, Smithers	4.1.3 Potential Effect of Dustfall: An additional potential effect from dustfall is impact to surface water quality either as sediment in aquatic habitat or as ML/ARD if from dust particulate.	Dustfall will be evaluated and modelled deposition data will be provided to the human health, water quality, and other disciplines to assess potential effects (draft Application Information Requirements (AIR) sections 4.1, 8.0, 4.3, etc.).

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-x	Northwest Institute, Smithers	(1/2) 4.3 Surface Water: These sections are critical to the effects assessment and yet the draft AIR appears vague and limited. Significantly more effort is recommended to outline expectations for surface water quality given the importance of this valued component. The opening paragraph of this section of the draft AIR describes a very narrow mechanism for surface water quality impact, sediment deposition. AMD and the other mechanisms described in section 2.6 of this document are also highly relevant mechanisms for impact to surface water quality and should be included in this discussion. The requirements in these sections are too general, and the draft AIR will not ensure that a meaningful technical review can proceed based on the information requirements outlined. Expectations should be clarified with respect to typical coal mine effects and assessment such as: • A bioaccumulation assessment of selenium in the aquatic environment • Requirements to consider speciation of selenium (and potential risks due to uptake by aquatic organisms)	The detailed water quantity and quality model being prepared will summarize methodologies and model results throughout the life of mine, closure, and post-closure phases. The water quality model (section 4.3) will incorporate parameters of potential concern, with relevant water quality guidelines. The Discharge Management Plan will outline monitoring programs (draft Application Information Requirements [AIR] section 13.0). BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, if modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* . A bioaccumulation assessment of selenium in the aquatic environment is being developed and prepared as part of the aquatic effects assessment (to determine selenium risk), and this will be presented in TCL's Environmental Assessment (EA) Application (section 4.3). The above-mentioned water quality model is currently set up to predict total selenium. With respect to selenium species, the mobile form is selenate and is typically present in surface waters; selenate can be reduced to selenite along groundwater pathways where an electron donor is present. It is possible that this could occur in seepage from the management ponds, however, the water quality model has been designed to be conservative; it assumes that selenium will not be reduced along this pathway.
IR-01-169-x	Northwest Institute, Smithers	(2/2) • Water quality objectives for Telkwa River and Bulkley River including non-degradation protection goals and development of community supported narrative water quality objectives. • Numeric water quality objectives or thresholds based on the narrative water quality objectives. • Management plans to protect surface water should be listed including AEMP, AMP, Mine Site Water Management Plan • Requirements to show the mine design is predicted to meet the water quality objectives agreed on with the other water users, and contingency planning to meet water quality objectives should monitoring show trends indicate that objectives may not be maintained. Overall, significantly more effort should be spent identifying expectations for water quality mitigation planning (that is beyond the scope of this review).	

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IR-01-169-y	Northwest Institute, Smithers	4.3.1 Surface Water Study Area: The Telkwa River downstream of project influence (i.e. confluence of Four Creek, Tenas Creek and Goathorn Creek and downstream of proposed discharge site) as well as the Bulkley River downstream of the confluence with the Telkwa River should be included in the LSA.	The Telkwa River downstream of project influence (i.e. confluence of Four Creek, Tenas Creek and Goathorn Creek and downstream of proposed discharge site) as well as the Bulkley River downstream of the confluence with the Telkwa River, are already included in the Regional Study Area (RSA). These points are part of the RSA for Fish and Fish Habitat and Aquatic Resources study areas that will be used for the regulatory application. The Local Study Areas (LSAs) have been enlarged. We noticed errors in the draft Application Information Requirements (AIR) figures and those will be corrected. As a result, the regional study area will be slightly extended to ensure we include our furthest monitoring location on the Bulkley River.
IR-01-169-z	Northwest Institute, Smithers	4.3.2 Surface Water Existing Conditions: Studies of existing conditions should reflect up-to-date scientific and analytical understanding of potential impacts. For example, older baseline water quality data is often hindered by detection limits and the list of species analyzed. In addition, methods for fish tissue analysis for metals, in particular selenium, have evolved significantly in the last 10 years, reflected in the current approach to selenium in BC water quality guidelines (i.e. measurement in egg/ovary, whole body and muscle tissue). Use of data from older versions of the Tenas project (i.e. Manalta Coal Ltd. will likely not include this level of understanding. The baseline data set must be sufficiently robust to assess recent trends in data. It is recommended that 5 years of monthly data be required. It is important to assess older data from reports as it may be outdated with respect to current conditions. Two highly relevant guidance documents to be included in this section are BC Ministry of Environment's guidance on Initial Dilution Zones (Development and Use of Initial Dilution Zones in Effluent Discharge Authorizations, Version 1.0, April 2019) and the Best Available Technology fact sheet (Best Available Technology Fact Sheet, March 2015). These two documents should be included in the list of guidance documents noted in the application.	New baseline surface water data collection studies commenced in 2017 to augment the existing database of historical water studies related to this property. We have adhered to the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators (BC Ministry of Environment [MOE], 2016) for the monthly and 5-in-30 sampling regimes. This dataset has been supplemented by publicly-available data (i.e., 1974, 1975, 1985 to 1992, 2001, 2002, 2004, 2006 to 2009, 2012). We have collected aquatic resources samples (including sediment quality, periphyton [biomass, taxonomy, and tissues], and benthic invertebrates [taxonomy and tissues]) in 2017 to 2019. BC MOE recommends sediment samples be collected once per year throughout the baseline program period, with which the program, has conformed. This program also satisfies the aquatic life data requirements and methodology outlined in BC MOE 2016, which requires a minimum of one (preferably, two or more) year(s) of baseline study data collection. This dataset has also been supplemented by publicly-available data (i.e., 1986 to 1990, 2000, 2004, 2006, 2007, and 2016). Fish tissue metal samples from rainbow trout were analyzed for the standard suite of metals (including selenium) in 2017 and 2018 from the Bulkley and Telkwa Rivers, Goathorn and Tenas Creeks, again with methods in accordance with the BC Water and Air Baseline Monitoring Guidance for Mine Proponents and Operators, as well as the Metal and Diamond Mining Effluent Regulations (MDMER) guidance. Additional tissue sampling is not recommended because too much lethal sampling could affect the resident fish population. We are consulting with provincial guidance documents for the initial dilution zone and best available technology. We will add these references in the draft Application Information Requirements (AIR).

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IR-01-169-a1	Northwest Institute, Smithers	4.3.3 Surface Water Potential Effects: Potential effects of the project on surface water quality also include changes of selenium speciation that make it more bioavailable, release of blasting residue (nitrate/ammonia), and release of calcite saturated water.	Ammonium, nitrate and fuel oil (ANFO) and associated nitrogen species release will be incorporated in water quality predictions for the Project. The model is set up to predict total selenium. The mobile form is selenate and is typically present in surface waters. Selenate can be reduced to selenite along groundwater pathways where an electron donor is present. It is possible this could occur in seepage from the management ponds but the water quality is conservatively modelled assuming selenium is not be attenuated along the pathway. Calcite saturation indices will be calculated to determine if calcite is supersaturated in the modelled solutions to determine if calcite has the potential to precipitate in site waters and discharge from the Project (draft Application Information Requirements section 4.3).
IR-01-169-b1	Northwest Institute, Smithers	4.3.4 Surface Water Mitigation Measures: Mitigation measures should include a best available technology assessment for water treatment conducted in conjunction with a alternatives assessment for discharge location.	A review of available technology for water treatment, if required, and discharge options and the associated initial dilution zone will be prepared as part of TCL's Environmental Assessment (EA) Application.
IR-01-169-c1	Northwest Institute, Smithers	4.4.2 Groundwater: The proposed project would involve storage of PAG material under water cover in PAG cells. Water from these cells may exfiltrate to ground water. The AIR needs to specify that the seepage impacts to Tenas Creek and Four Creek must be fully characterized through appropriate hydrogeological models. This includes the potential for seepage from the pit to the receiving environment.	Seepage from the management ponds will be minimized with an engineered liner system. The details of the pond designs as well as the surface water and hydrogeological modelling results will be presented in TCL's Environmental Assessment (EA) Application (sections 1.0, 4.3, 4.4).
IR-01-169-d1	Northwest Institute, Smithers	4.5 Aquatic Resources: Levels of metals in invertebrates should be included as an indicator for this intermediate component.	The indicator for invertebrates for the effects assessment is “change in composition, abundance, or diversity of periphyton or benthic invertebrates”. While metal/metalloid concentrations in invertebrate tissues are not an indicator for the Aquatic Resources component of TCL's Environmental Assessment (EA) Application, we will monitor metals/metalloids in the tissues of stream invertebrates (in addition to periphyton-composited samples) annually in each of the first three years of operation, and at three-year intervals thereafter. This will be presented as a plan nested under the Discharge Management Plan in Section 13.0 of the draft Application Information Requirements (AIR) should the above-mentioned monitoring result in significant increases in metal/metalloid concentrations in invertebrate tissue - exceeding those measured during baseline studies - the scope and temporal scale of monitoring would be expanded.

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IR-01-169-e1	Northwest Institute, Smithers	4.5.1 Aquatic Resources Study Area: The Telkwa River downstream of project influence (i.e. confluence of Four Creek, Tenas Creek and Goathorn Creek and downstream of proposed discharge site) as well as the Bulkley River downstream of the confluence with the Telkwa River should be included in the LSA.	We have included these areas and downstream to the furthest water quality monitoring station we have on the Bulkley River near Telkwa. Considering the anticipated discharge chemistry and the large mixing zone in the Bulkley River, extending the study area further downstream was deemed not necessary. We did notice errors in the draft Application Information Requirements (AIR) figures and those figures will be corrected. Specifically, the study area will be slightly extended to include our furthest monitoring location on the Bulkley River.
IR-01-169-f1	Northwest Institute, Smithers	4.5.2 Aquatic Resources Existing Conditions: Baseline studies should also	(1/2) The indicator for invertebrates for the effects assessment is “change in composition, abundance, or diversity of periphyton or benthic invertebrates”. While metal/metalloid concentrations in invertebrate tissues are not an indicator for the Aquatic Resources component of our Environmental Assessment (EA) Application, we will monitor metals/metalloids in the tissues of stream invertebrates (in addition to periphyton-composited samples) annually in each of the first three years of operation, and at three-year intervals thereafter. This will be presented as a plan nested under the Discharge Management Plan in Section 13.0 of the draft Application Information Requirements should the above-mentioned monitoring result in significant increases in metal/metalloid concentrations in invertebrate tissue - exceeding those measured during baseline studies - the scope and temporal scale of monitoring would be expanded. We are aware that receiving waters downstream of coal mines in other areas in BC have exhibited elevated selenium concentrations. In these other areas, monitoring of selenium in water and sediment, stream invertebrates and fish tissue (i.e., muscle and ovary) is undertaken (e.g., Elk Valley Regional Aquatic Environmental Monitoring Program (RAEMP); updated 2018).

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IR-01-169-f1	Northwest Institute, Smithers	4.9.2 Aquatic Resources Existing Conditions: Baseline studies should also include assessment of selenium levels in invertebrate tissue as this is a potential pathway for bioaccumulation of selenium in fish. Further, river sediment should be assessed for the presence of calcite, as deposition of calcite sediment can occur from coal mining contact water.	(2/2) Some aspects of this type of monitoring are also conducted at other mines across the province, as required either by provincial effluent permits (i.e., BC *Environmental Management Act*) and/or federal regulations (i.e., Metal Mining Effluent Regulations). A key difference is that selenium does not occur in elevated concentrations in the mined rock in the Tenas deposit, and, overall, geochemical tests and water quality predictions indicate that selenium aquatic risk will not be significant downstream of the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm and validate geochemical predictions, and apply additional mitigation measures, as required. The derivation basis for the BC water quality guideline for selenium, in parallel with water quality modelling results and other risk management frameworks for selenium, provide a scientifically-defensible approach for the adaptive management of monitoring and mitigation approaches to address aquatic ecological risks related to selenium. The tiered evaluation approach outlined in Beatty & Russo (2014) would involve monitoring for selenium concentration changes in water and sediment, and also in biological tissues (e.g., fish muscle, egg/ovary tissues), should BC water quality guidelines for selenium be exceeded, or should concentrations of selenium be found to greatly exceed baseline concentrations. Finally, calcite saturation indices will be calculated to determine if calcite is supersaturated in the modelled solutions to determine if calcite has the potential to precipitate in site waters and discharge from the Project.
IR-01-169-g1	Northwest Institute, Smithers		(1/2) The indicator for invertebrates for the effects assessment is “change in composition, abundance, or diversity of periphyton or benthic invertebrates”. While metal/metalloid concentrations in invertebrate tissues are not an indicator for the Aquatic Resources component of our Environmental Assessment (EA) Application, we will monitor metals/metalloids in the tissues of stream invertebrates (in addition to periphyton-composited samples) annually in each of the first three years of operation, and at three-year intervals thereafter. This will be presented as a plan nested under the Discharge Management Plan in Section 13.0 of the draft Application Information Requirements should the above-mentioned monitoring result in significant increases in metal/metalloid concentrations in invertebrate tissue - exceeding those measured during baseline studies - the scope and temporal scale of monitoring would be expanded. We are aware that receiving waters downstream of coal mines in other areas in BC have exhibited elevated selenium concentrations. In these other areas, monitoring of selenium in water and sediment, stream invertebrates and fish tissue (i.e., muscle and ovary) is undertaken (e.g., Elk Valley Regional Aquatic Environmental Monitoring Program (RAEMP); updated 2018).

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-169-g1	Northwest Institute, Smithers	4.5.3 Aquatic Resources Potential Effects: Potential effects also include increase of selenium levels in invertebrates as well as deposition of calcite sediment in the receiving environment.	(2/2) Some aspects of this type of monitoring are also conducted at other mines across the province, as required either by provincial effluent permits (i.e., BC *Environmental Management Act*) and/or federal regulations (i.e., Metal Mining Effluent Regulations). A key difference is that selenium does not occur in elevated concentrations in the mined rock in the Tenas deposit, and, overall, geochemical tests and water quality predictions indicate that selenium aquatic risk will not be significant downstream of the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm and validate geochemical predictions, and apply additional mitigation measures, as required. The derivation basis for the BC water quality guideline for selenium, in parallel with water quality modelling results and other risk management frameworks for selenium, provide a scientifically-defensible approach for the adaptive management of monitoring and mitigation approaches to address aquatic ecological risks related to selenium. The tiered evaluation approach outlined in Beatty & Russo (2014) would involve monitoring for selenium concentration changes in water and sediment, and also in biological tissues (e.g., fish muscle, egg/ovary tissues), should BC water quality guidelines for selenium be exceeded, or should concentrations of selenium be found to greatly exceed baseline concentrations. Finally, calcite saturation indices will be calculated to determine if calcite is supersaturated in the modelled solutions to determine if calcite has the potential to precipitate in site waters and discharge from the Project.
IR-01-169-h1	Northwest Institute, Smithers	4.6.1 Fish and Fish Habitat Study Area: The Telkwa River downstream of project influence (i.e. confluence of Four Creek, Tenas Creek and Goathorn Creek and downstream of proposed discharge site) as well as the Bulkley River downstream of the confluence with the Telkwa River should be included in the LSA.	We have included these areas and downstream to the furthest water quality monitoring station we have on the Bulkley River near Telkwa in the Regional Study Area. We expect the chemical constituents in discharge water will be close to background levels and, considering the large mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream, therefore extending the study area further downstream was not necessary. We did notice errors in the draft Application Information Requirements (AIR) figures. Those will be corrected. That is, the study area will be slightly extended to ensure we include our furthest monitoring location on the Bulkley River.

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IR-01-169-i1	Northwest Institute, Smithers	4.6.2 Fish and Fish Habitat Existing Conditions: Include selenium concentrations (baseline and predicted) in fish tissues. Fish tissues should include ovary and muscle tissue concentrations as per BC water quality guidelines for selenium, similar to baseline work done for other proposed coal mines. At present the subcomponents and indicators are too limited and lack clarity. Current fish health, abundance and condition is not a prediction of future fish health, abundance and condition. This is a reason to have precautionary water quality targets that avoid risk and respect the inherent value of water that is not substantially altered by industrial projects. Presence of calcite sediment should be assessed as part of this VC.	We are aware that receiving waters downstream of coal mines in other areas in BC have exhibited elevated selenium concentrations. In these other areas, monitoring of selenium in water and sediment, stream invertebrates and fish tissue (i.e., muscle and ovary) is undertaken (e.g., Elk Valley Regional Aquatic Environmental Monitoring Program [RAEMP]; updated 2018). Some aspects of this type of monitoring are also conducted at other mines across the province, as required either by provincial effluent permits (i.e., BC *Environmental Management Act*) and/or federal regulations (i.e., Metal Mining Effluent Regulations). A key difference is that selenium does not occur in elevated concentrations in the mined rock in the Tenas deposit, and, overall, geochemical tests and water quality predictions indicate that selenium aquatic risk will not be significant downstream of the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm and validate geochemical predictions, and apply additional mitigation measures, as required. The derivation basis for the BC water quality guideline for selenium, in parallel with water quality modelling results and other risk management frameworks for selenium, provide a scientifically-defensible approach for the adaptive management of monitoring and mitigation approaches to address aquatic ecological risks related to selenium. The tiered evaluation approach outlined in Beatty & Russo (2014) would involve monitoring for selenium concentration changes in water and sediment, and also in biological tissues (e.g., fish muscle, egg/ovary tissues), should BC water quality guidelines for selenium be exceeded, or should concentrations of selenium be found to greatly exceed baseline concentrations. Finally, calcite saturation indices will be calculated to determine if calcite is supersaturated in the modelled solutions to determine if calcite has the potential to precipitate in site waters and discharge from the Project.
IR-01-169-j1	Northwest Institute, Smithers	4.6.3 Fish and Fish Habitat Potential Effects: Elevated levels of metals and metalloids (particularly selenium) in fish tissue, deposition of calcite sediment and impact of heavy metals and acidity on fish migration patterns1 should be included as a potential effect in the Fish and Fish Habitat VC.	Investigations and/or monitoring of fish migration patterns related to elevated concentrations of metals and metalloids is not warranted for the Tenas Project. While we recognize that published research exists on potentially-altered migratory behaviours of some salmonid species as a result of impaired olfaction (e.g., due to the presence of copper ions and a limited number of other elements in water), the professional opinion of our technical team is that such an effect is highly improbable in light of the substantial differences between experimental exposure conditions used to demonstrate the linkage between fish migration and the measured and/or modelled hydrogeochemical profiles of Goathorn and Tenas Creeks, the Tenas Project receiving environments during both operation and post-closure. Moreover, altered migratory behaviour - if it were to occur – would translate into altered recruitment in local and regional fish populations. The routine monitoring of the status of such fish populations will, by extension, also serve to detect any changes in mechanistic steps relating to fish life cycle parameters, such as fecundity, recruitment, and population demographics.

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IR-01-169-k1	Northwest Institute, Smithers	4.9 Avian Species: The presence of selenium in bird eggs should be included as an indicator for the Avian Species VC, as per BC water quality guidelines.	The indicators for the Avian Species Valued Components (VC), as identified in the draft Application Information Requirements (AIR), are habitat (including sensory disturbance), mortality and movement. We will include consideration of selenium analyses in bird eggs, as part of the aquatic environmental monitoring program, if there is an indication of project-related elevated selenium concentrations in the water and/or benthic invertebrates. The selenium bioaccumulation modelling being conducted as part of the aquatic effects assessment, and water and aquatic resource monitoring data, from ongoing, scheduled monitoring (including the monitoring of water, sediment, aquatic plant tissues, and benthic invertebrate tissues) will inform this evaluation.
IR-01-169-l1	Northwest Institute, Smithers	4.9.2 Avian Species Existing Conditions: Data on selenium levels in bird eggs should be collected as part of baseline studies.	Metals concentrations (including selenium) in water samples have been collected during environmental baseline studies. Analysis of selenium in bird eggs requires lethal sampling and has not been conducted as part of the Tenas Project baseline studies. Ongoing, scheduled monitoring of selenium concentrations in water, sediment, aquatic plant tissues, and benthic invertebrate tissues using reference and exposure sites will allow for the detection of conditions for which there is the potential for concentrations to exceed BC water quality guidelines for selenium; this could include the potential for accumulation in bird eggs. Should there be an indication that selenium can accumulate up the food chain, additional monitoring (i.e., lethal sampling of bird eggs) may be conducted at both reference and exposure sites.
IR-01-169-m1	Northwest Institute, Smithers	4.9.3 Avian Species Potential Effects: Elevated levels of selenium in bird eggs should be included as a potential effect in the Avian Species VC.	Metals concentrations (including selenium) in water samples have been collected during environmental baseline studies. Analysis of selenium in bird eggs requires lethal sampling and has not been conducted as part of the Tenas Project baseline studies. Ongoing, scheduled monitoring of selenium concentrations in water, sediment, aquatic plant tissues, and benthic invertebrate tissues using reference and exposure sites will allow for the detection of conditions for which there is the potential for concentrations to exceed BC water quality guidelines for selenium; this could include the potential for accumulation in bird eggs. Should there be an indication that selenium can accumulate up the food chain, additional monitoring (i.e., lethal sampling of bird eggs) may be conducted at both reference and exposure sites.

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IR-01-169-n1	Northwest Institute, Smithers	6.4 Land and Resource Use: The land and resource use section should include the sections of the Telkwa River and Bulkley River in the local study area as potentially effected public resources. These watercourses are used by the community as public resources.	The Local Study Area (LSA) for the Non-Traditional Land Use Baseline Report is the same as the Vegetation LSA, encompassing sections of the Telkwa and Bulkley rivers and covering over 3,000 ha around the Mine Infrastructure and Project area. This includes a 250 m buffer zone around the mine access road and a 500 m buffer zone around the Project disturbance area. The Regional Study Area (RSA) for non-Traditional land use is the same as the Wildlife RSA and covers an area over 178,000 ha, encompassing the Village of Telkwa, the Regional District Bulkley Nechako (RDBN) Area A and a small northern portion of RDBN Area G. The Wildlife RSA was selected to capture direct and indirect effects to land use and tenure in the area surrounding the Minesite. Human land uses and wildlife activities are influenced by larger landscape features, such as the Hazelton Mountains and the Skeena watershed. These natural boundaries were taken into consideration when the RSA was selected.
IR-01-169-o1	Northwest Institute, Smithers	9.0 Accidents and Malfunctions: Misplacement and mischaracterization of PAG material should be considered as a malfunction or accident that is to be discussed in the application.	TCL's Environmental Assessment (EA) Application Accidents and Malfunctions (Section 9.0) will include a discussion of potential accidents and malfunctions related to the handling of Potentially Acid Generating (PAG) materials.
IR-01-169-p1	Northwest Institute, Smithers	13.0 Management Plans: Management plans for selenium and nitrogen should be included in the application. Selenium management plan refers to management and monitoring of selenium contamination resulting from the mine. For coal mines, it is standard to consider selenium management mitigation planning. This is a key omission in the draft AIR as this expectation is not clarified. Coal mines typically have some concerns regarding selenium and the past work on this mine may have missed this as it occurred some time ago. The AIR needs to outline expectations for characterization of current and predicted selenium species in water, invertebrates and fish tissue. Nitrogen management refers to management of water soluble explosive residue on blasted material and subsequent water quality impact. A Care and Maintenance management plan should be included in the application.	Geochemical testing has indicated that the selenium composition of the rock is lower in comparison to other mines in British Columbia, and that the potential for leaching at elevated concentrations is also lower at the Tenas project. Ultra-low, solid-phase analyses of selenium were included in the geochemical characterization of rock, and only 1% of the samples collected yielded elevated selenium relative to average crustal abundances. In addition, seep analyses from the bulk sample site indicated that selenium was <0.0002 mg/L. Nevertheless, characterization of modelled selenium concentrations in receiving waters, periphyton, benthic invertebrates and fish tissue, based on a selenium bioaccumulation model, will be integrated into the aquatic effects assessment. We will add the Selenium Management Plan to the draft Application Information Requirements (AIR) Section 13.0 list. It will be nested within the Discharge Management Plan. Our Reclamation and Closure Plan will include care and maintenance procedures. This is a permitting requirement. An Explosives Management Plan has already been included in the section 13.0 List of Management Plans in the draft AIR. This Plan is equivalent to a Nitrogen Management Plan, as explosives are the potential source of nitrogen compounds, not the mined rock. Water quality effects of water-soluble explosive residues, specifically, nitrate and nitrite, will be evaluated (as part of the aquatic effects assessment), monitored and managed during mine operations and closure phases of the Project.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-170	Daphne Hart, Smithers BC	What very specific details can science reveal about the potential for negative effects on the air quality in this airshed caused by dust from mining and transporting coal? Air quality ,and PM2.5 levels in particular, are currently known to be problematic in our airshed. It is complex in part because of temperature inversions in this mountainous environment. Would it be possible to guarantee no worsening of this already serious problem? Clean air is a Valued Component to be protected. Caribou have Species at Risk Protection status by the Federal Government. The local communities have made major efforts to limit human disturbances in the Telkwa Mountains to protect this fragile population. What can science reveal about the effect of disturbance from mine development and ongoing activity and noise? Wildlife is intrinsically a Valued Component of life in the Bulkley Valley. What can be determined about the risks this mine will present to caribou specifically. I would like to see the scientific process develop a clear picture of risk to already challenged fish stocks in the NorthWest, to the water supply, and to the integrity of our river water. Local problems effect an area well beyond local borders. How is this potential mine development understood in the bigger picture of planetary health? I believe we have just experienced a monumental shift in our understanding of why we need climate change to be lived as a priority analogous to the unfolding of the Covid -19 pandemic. Will this mine be reconciled with the UN Declaration on the Rights of Indigenous People?	Dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (see draft Application Information Requirements [AIR] section 4.1). The assessment of caribou (draft AIR section 4.8) will include a cumulative effects assessment considering the historical disturbances noted (Historical projects are inherently included in the baseline). Both federal and provincial caribou biologists are part of the Environmental Assessment Office (EAO) Working Group. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, vegetation, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's Environmental Assessment (EA) Application (draft AIR sections 4.3 to 4.8, 6.4, 8.0, 11.0, and 13.0). Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access their territory for the purposes of conducting studies for our project. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the OW have set out for us. We recognize the need to reduce emissions to help meet climate objectives. Steelmaking coal is a necessary ingredient in the production of steel (750 kg of steelmaking coal is required for every 1,000 kg of steel), which in turn is used in the production of many green energy solutions that will help us address global climate change. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels).
IR-01-171	Anonymous, Nelson, BC	I am expressing my concern over the possible devastating effects of the Tenas Coal mine proposal to both water quality and salmon and steelhead species. Acid rock drainage and metal contaminants are common problems for coal mines. Alliance Coal's commitment (or lack there of) to maintaining water quality in the region is alarming. All of these concerns would warrant examination anyway, but given that coal prices are low, and the world generally is looking for cleaner sources of energy, it makes the wisdom of this project even more questionable.	Water quality and quantity and physical interactions with fish habitat are key elements of the aquatic effects assessment that will be conducted in support of TCL's Environmental Assessment (EA) Application. As described in the draft Application Information Requirements (AIR), these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The concerns being raised are specifically being addressed in detailed aquatic modeling. The coal at the Tenas deposit is for use in steelmaking. Steel is widely used in our modern society, such as for infrastructure, transportation (electric vehicles), communications, and energy generation (wind turbines, solar panels). We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner.

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Tracking #	**Submitter**	**Comment**	**Proponent response**
IR-01-172	Charlotte Euverman, Smithers BC, Canada	I am adopting the attached comments/summary from the group What Matters In Our Valley (WMIOV), Thank you. Documents Attached: 2020 july_WMIOV Comments re dAIR. Pdf, 2020 July_Summary WMIOV Comments on dAIR.pdf	Thank you for your comment. Kindly refer to our replies below.
IR-01-172-a	Charlotte Euverman, Smithers BC, Canada	(1/2) 1. Size Matters When Telkwa Coal first proposed this project, it stated that its plan was to develop an open-pit coal mine producing 240,000 tonnes of coal per annum (tcpa) of product. This production level happened to be just under the then existing Provincial Environmental Assessment threshold of 250,000 tcpa. WMIOV and others complained to the Ministry about what seemed to be a transparent attempt to get around the EA process. Telkwa Coal then revised its proposal and submitted a draft mine plan identifying the mine project's objective to be 750,000 tcpa. However, since then, in its public statements to the business community contained in its Corporate Reports, Telkwa Coal has repeatedly stated that its true objective is to "ramp up" to 1.35 million tonnes per year. (See, e.g. Allegiance Coal (Telkwa Coal's Corporate parent) Corporate Presentation, May 2020, p. 8.)	We assessed several options for production rates for the project in our technical and economic studies ranging from 250,000 saleable tonnes per annum to 1.8 million saleable tonnes per annum. As a result of those studies, we are proceeding with a project with an annual production rate of 775,000 to 825,000 tonnes. Our annual production rate is expected to be 775,000 to 825,000 tonnes (0.75-0.8 million tonnes per annum [MTpa]), well below the federal assessment threshold of 1.85 MTpa. Any future plans to increase production would require an additional regulatory process that will also have Indigenous consultation and public engagement.
IR-01-172-a	Charlotte Euverman, Smithers BC, Canada	(2/2) Despite this, the Environmental Assessment office continues to review this proposal as if it were for a mine producing at the 750,000 tcpa level. So which is it? If 1.35 million tonnes, it simply does not make sense for the Environmental Assessment to take place based on misinformation about the scope of the project. Size matters because it affects all of the potential environmental and social impacts. Just as one example, while Telkwa Coal currently describes its proposed water usage for cleaning coal as 15,000 litres per hour, under the 1.35 million tonne scenario, usage would have to be almost twice that. What effect will this have on toxins, water runoff, water sources, capacity to control acid rock drainage (ARD) and cumulative effects? RECOMMENDATION: That the EAO require Telkwa Coal to amend its application to reflect its true plan which is to mine at least 1.35 million tonnes per annum and that the dAIR be revised accordingly.	

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IR-01-172-b	Charlotte Euverman, Smithers BC, Canada	(1/2) 2. Water and Fish Water - The dAIR relies on what are known as Valued Components (VC). These are the attributes and potential areas of concern that are most important in judging the mine proposal's merits. Surprisingly, Water is not identified in the dAIR as one of the Valued Components. Instead, it is considered an Intermediate Component (IC). ICs can be ignored in the final analysis, as long as the VCs they are related to (in this case fish) are sufficiently protected or, even if there are ill effects, those effects can be adequately mitigated. In other words, as long as there are not unacceptable risks to the fish or if mitigation is possible, then protecting water will not be a priority under the current dAIR. Water has both high societal value and high ecological value and therefore should be selected as a Valued Component as part of this Environmental Assessment, and not just as an Intermediate Component. Our rivers and our water quality are of immense historical and cultural importance to the people of the Bulkley/Wetzinkwa Valley. The attempt to diminish that importance in the review of this project is frankly surprising, especially given the quite serious risks the project poses to these treasured parts of our heritage.	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using VCs only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. Water quality and quantity and physical interactions with fish habitat are

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IR-01-172-b	Charlotte Euverman, Smithers BC, Canada	(2/2) Fish – The boundaries for review under the dAIR are limited to the Telkwa and a short stretch of the Bulkley just down stream from the confluence. Given the importance of the rivers and the fish, as well as the significant threats that already exist to fish survival, this seems quite inadequate. In addition, while the dAIR refers to relying on current science-based thresholds for contaminants that pose a risk to fish, those thresholds may not be sufficient to actually protect fish stocks. Our fish runs are already imperilled. Levels of heavy metals in the Telkwa are already significant. We suggest that the impact assessment include a comprehensive literature review to select conservative effect thresholds that ensure potential impacts to valuable aquatic resources are not missed. RECOMMENDATIONS: • That Water be treated as a Valued Component in the dAIR. • That the boundaries set for analysis of adverse effects include the entire Skeena system. • That the precautionary principle be applied due to the pre-existing threats to fish survival. • That the AIR call for a review of the latest scientific literature and analysis to help determine appropriate thresholds for fish toxicity, including sub-lethal effects.	key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's EA Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0). The purpose of the Regional Study Area (RSA) is to define the area which the project will review and assess potential effects, both directly from the project or cumulatively with other existing or future projects. The RSA conforms to the Telkwa River watershed and extends downstream to capture the furthest water quality sampling location, near Telkwa. We expect the discharge water will be similar to background levels and, considering the mixing zone in the Bulkley River, the discharge is modelled to not be measurable a short distance downstream. Expanding the study area down to the Skeena would generate data not expected to be (or that would not be) project specific. Environmental thresholds are established using guidance from the Ministry of Environment's Technical Guidance 8 document "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act.*

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IR-01-172-c	Charlotte Euverman, Smithers BC, Canada	3. Water Usage - Rivers, Creeks and Underground Sources A coal mine of this nature requires the use of large volumes of water for washing the product (as noted above, according to Telkwa Coal 15,000 litres per hour at the 750,000 tonne per year production rate). The washing of the coal will take place alongside the mine site. Telkwa Coal claims that it hopes to obtain enough water from the neighbouring creeks, runoff and underground sources to meet its needs in this regard. If not, it will draw from other sources in the Regional District. We assume this means the Telkwa River because what other nearby sources are there? Neighbours are also concerned that the use of underground sources will deplete the wells they rely on for their household water supply. RECOMMENDATION: The AIR must require sufficient information to determine if the water budget for the mine project will account for the project impacting a wider water system. In practical terms, the water budget that Telkwa Coal provides for and how the characteristics of the water (quantity, intensity and quality) are managed to balance it, must be done in such a way as to satisfy all of the constraints on all water issues including fish survival, simultaneously.	The draft Application Information Requirements (draft AIR) does not go into specific details as that level of detail is beyond the scope of a draft AIR submission. The type of information and level of detail that was provided in the draft AIR is commensurate with guidance provided by the BC Environmental Assessment Office (EAO). For your reference, the AIR template provided by BC EAO is found here: https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-air-template.docx The purpose of the draft AIR is to identify the information that is to be included in TCL's Environmental Assessment (EA) Application. As identified in the draft AIR sections 4.3 and 4.4, surface water and groundwater are components of TCL's EA Application with their subcomponents of quantity and quality. As well, fish and fish habitat are included as components in the EA Application (draft AIR section 4.6). These chapters will be presented in TCL's EA Application along with a water balance. The water balance model will consider climate change variations as well as seasonal and annual variability in streamflow, precipitation and evaporation. The water cover in the Potentially Acid Generating (PAG) management ponds will be tested under a range of hydrologic conditions, including extensive droughts. In addition, mitigation measures to reduce evaporative and seepage losses have been included to further strengthen the positive water balance for the water covers.
IR-01-172-d	Charlotte Euverman, Smithers BC, Canada	(1/2) 3. Acid Rock Drainage and Metal Leaching a. Tailings Impoundment - Separation of Materials Telkwa Coal acknowledges that its operations will produce significant quantities of Potential Acid Generating (PAG) materials. PAG results in Acid Rock Drainage if exposed to the elements. There is also a substantial risk of leaching of heavy metals. Heavy metals are highly toxic to fish. To prevent ARD, Telkwa Coal must separate PAG from non- PAG and then remove the PAG from contact with the environment forever. Telkwa Coal's current plan is to create a containment pond or ponds alongside the mine and place the PAG material and other toxic sources into this containment area and cover it with water. The resulting tailings impoundment(s) will cover an area about 1/2 the size of Tyhee Lake and about 40 metres deep. To carry out this plan, Telkwa Coal must separate the PAG material and the non-PAG material. The PAG material would then be submerged in the containment areas and the non-PAG material would be piled alongside the mine pit and impoundment areas.	Per section 4.3.3 of the draft Application Information Requirements (AIR), the Environmental Assessment (EA) methodology with respect to potential effects of Metal Leaching (ML)/Acid Rock Drainage (ARD) on surface water will be described in TCL's EA Application. The geochemical studies for this project are extensive with several characterization programs and collection of hundreds of continuous samples from drill holes. Industry best practices (e.g., MEND 2009, INAP 2009) have been used to develop an understanding of where the Potentially Acid Generating (PAG) rock is located in the deposit so it can be segregated and managed during operations

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IR-01-172-d	Charlotte Euverman, Smithers BC, Canada	(2/2) However, according to one of the reviewers during the similar Manalta project in the mid-1990's, it is highly unlikely that such a separation process could work. Even if the separation could occur, it would take a considerable amount of time for this to take place. What happens to the acid generating material in the meantime since, as soon as the material is exposed to the environment it starts acidifying and, thus, creating polluted runoff? b. Tailings Impoundment - Containment Plan Once the Acid Rock generating material is submerged in a containment lake, it must be preserved there forever. Reviewers during the Manalta process thought that, given the topography and underlying geology of the area, including the faults and fractures that exist there, it is unlikely that the impoundment would successfully retain the ARD material and/or heavy metals. RECOMMENDATION: • The methodology for describing the impact of metal leaching and acid rock drainage must be specified. • The AIR should include direct reference to best practices for characterizing ML/ARD, such as those included in guidance prepared in 2009 for the British Columbia Ministry of Energy, Mines and Petroleum Resources. • There must be a detailed geotechnical analysis of the rock formations and likelihood of fractures, faults and other causes of possible loss of stability leading to failure of containment.	(i.e., PAG and non-PAG zones are considered in the mine plan). PAG material will be placed in management ponds and submerged to minimize oxidation of sulfide in the materials and acid production. The mine will be operated according to the ML/ARD Management Plan (draft AIR section 13.0) currently being prepared as part of TCL's EA Application. A geochemistry baseline report will also be submitted with the application that specifies the characterization methods and geochemical testing results. As part of TCL's EA Application and *Mines Act* / Environmental Management permit application a geotechnical analysis of the management ponds will be provided. A water balance will also be completed, and optimized during operations, to maintain water cover in the management ponds.
IR-01-172-e	Charlotte Euverman, Smithers BC, Canada	(1/3) 5. Water Treatment - Heavy Metals and other Toxins The mine area contains heavy metals which are toxic to fish. In addition to Cadmium, Aluminum, Copper, Manganese Iron, Nickel and Zinc, there is an open question about the amount of selenium that will be produced. During the Manalta process, the reviewers concluded that the amount of selenium would be below Provincial threshold levels. However, since that time, the thresholds have been lowered due to findings about fish toxicity. a. Removal of heavy metals and other toxins The release of selenium from coal mining has proven to be a significant issue and has been a large driver of water treatment and management requirements at coal projects around the Province. We know from the experience at the Teck mines in the Elk Valley that even the most advanced and expensive technology for removing selenium does not work. Telkwa Coal proposes to treat water runoff from its operations by cleaning it to a point where it supposedly does not pose a risk to the river and the fish and then to pipe it to the Telkwa River for discharge. Will it be possible to successfully treat and clean the runoff?	The stratigraphy at the Tenas project is different from the stratigraphy in the Elk Valley and the Elk Valley is not a direct analogue for the Tenas project. Ultra-low solid phase analysis of selenium at Tenas was included in a supplemental geochemical characterization study of rock in 2018. Only 1% of the samples collected showed that selenium was elevated relative to average crustal abundances in the solid phase. In addition, seep sampling from the bulk sample site in the 1990s showed that selenium was <0.0002 mg/L when sulfate was in typically in the hundreds of mg/L range. The geochemical test results indicate that selenium is not anticipated to

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IR-01-172-e	Charlotte Euverman, Smithers BC, Canada	(2/3) b. Discharge to Telkwa River Even if Telkwa Coal could successfully clean the runoff, how will dumping it into the Telkwa affect water temperature, water flow and other factors critical to water quality and the fish? The proposed project would discharge mine impacted water directly to the Telkwa River. Sampling of the Telkwa River indicates that it has levels of cadmium, zinc and lead that are already above BC Water Quality Guidelines (BC WQGs). Any additional loading of these metals would cause further exceedance of BC WQGs in the Telkwa and may have a deleterious effect on fish and other aquatic life. Further, guidance from BC Ministry of Environment (ENV) states that dilution alone is not an acceptable method of managing mine contact water. c. Limited Water Treatment The proposed project involves very limited treatment of mine impacted water prior to discharge to the Telkwa River. The proposed treatment method (sedimentation) would only remove suspended solids and would not have any impact on dissolved materials that are present. There are many industrially proven methods for treating mine contact water of this nature to remove dissolved species.	[illegible] occur in elevated concentrations in rock at the Tenas project. Nevertheless, we will monitor site water quality during operations to confirm the geochemical test results. An alternatives assessment (draft Application Information Requirements [AIR] section 1.4) will be carried out to determine the optimal discharge location, and Initial Dilution Zone modelling will be completed using Ministry of Environment guidance as a basis. Discharge locations and timing will be subject to government requirements. As noted, BC has established water quality guidelines for both drinking water, as well as freshwater aquatic life. These guidelines are reviewed and revised from time to time based on additional scientific data. In general, current BC freshwater aquatic life guidelines have been derived by applying arbitrary safety factors to selected toxicology data gathered from the scientific literature. The Canadian Council of Ministers of Environment (CCME) - and most other international jurisdictions - use the Species Sensitivity Distribution (SSD) approach to derive these guidelines and BC has indicated that it will adopt the SSD approach. In general, when modelled values are higher than (exceed) a generic guideline, this does not necessarily mean that there is an unacceptable risk. Rather, exceeding a guideline indicates that there is a need for additional, more site-specific assessments to determine the potential for environmental risk. Site-specific environmental thresholds are established following guidance from the Ministry of Environment's Technical Guidance 8 document entitled: "A Framework for the Development and Use of Freshwater Science-Based Environmental Benchmarks for Aquatic Life", under the *Environmental Management Act* .
IR-01-172-e	Charlotte Euverman, Smithers BC, Canada	(3/3) RECOMMENDATIONS: • Selenium - That a detailed assessment of selenium release potential and management methods (i.e. selenium treatment, other waste handling methods) be conducted and integrated into the project plan. • Mine Water Discharge - That an Alternatives Assessment be conducted to evaluate a location for discharge of mine water and that Ministry of Environment guidance on the use of initial dilution zones be incorporated into the mine plan. • Water Treatment - That a Best Available Technology assessment for water treatment be conducted in accordance with BC ENV guidance. This should be conducted in conjunction with the aforementioned discharge Alternatives Assessment.	

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IR-01-172-f	Charlotte Euverman, Smithers BC, Canada	6. Allowance for Care and Maintenance: A common issue in mining projects is that projects are designed with the expectation that they will go from start-up to operations to closure in one continuous span. In actuality, many mines have periods of care and maintenance when the mine is taken offline for a significant period of time without initiating reclamation and closure activities. It is important to design a mine with allowance for care and maintenance periods and to have a detailed care and maintenance plan that is distinct from the closure and reclamation plan. One area where this may be relevant for the Tenas project is in PAG material handling. Pit capacity must be available at the same time as PAG material is generated in order to avoid temporary surface storage. RECOMMENDATION: That Care and Maintenance be included in the dAIR as a project phase that is evaluated similar to the way that Construction, Operations, Closure and Post-Closure are included as project phases.	Per section 13.0 of the draft Application Information Requirements (AIR), there will be a Reclamation and Closure Plan. Care and maintenance procedures will be part of this plan. This is also a permitting requirement. This plan will include management of Potentially Acid Generating (PAG) material during potential periods of care and maintenance.
IR-01-172-g	Charlotte Euverman, Smithers BC, Canada	7. Caribou The Telkwa Caribou herd is listed under the Species at Risk Act and is identified as at threat of imminent extirpation. The herd is currently at approximately 34 animals. To prevent extinction of the herd, a Wildlife Management Area was recently created in the Telkwa Mountains. The long term goal is to restore a mature forest with limited disturbances in the form of logging, road building and further habitat destruction. The Telkwa Coal Mine location is almost completely within the Telkwa Caribou Wildlife Management Area. It will result in a removal of a substantial area of re-growing forest and create a haul road that will cross a part of the recovery zone. Coal hauling trucks will pass along this road somewhere between every 5 and 10 minutes. The establishment of the mine is inconsistent with the Caribou recovery plan and will prevent the return of undisturbed mature forests in the area. As a consequence, it will put further pressure on a herd that is already on the brink just as it starts to recover. RECOMMENDATION: That the AIR should require an assessment of the likely impact on the success of the Caribou recovery program's objective of restoring the herd to a healthy population, not just on one that is so reduced in numbers that it is at this time at imminent threat of extirpation.	The assessment of caribou will include a cumulative effects assessment (CEA) considering the historical disturbances mentioned (COMMENT: historical projects are inherently included in the baseline). Due to the complexity of factors affecting the Recovery Program (e.g., complex factors affecting the population ecology of the Telkwa Caribou Herd [TCH], the large size of the herd range and surrounding matrix that affects it, and the cumulative human stressors on the landscape) it is impractical and ineffective for a single project to assess its effects on the Recovery Program. However, this assessment will provide analyses of TCH data and an assessment of cumulative effects that may be informative to the agencies responsible for developing and implementing the TCH Recovery Program.

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IR-01-172-h	Charlotte Euverman, Smithers BC, Canada	8. GHG Emissions – Full cycle including methane and alternatives While Telkwa Coal identifies this project as intended to produce coal for steelmaking (metallurgical coal) and not for energy production (thermal coal), this does not resolve the question of its effect on greenhouse gas emissions. 90% of the CO2 contained in metallurgical coal is released during the steel making process. Steel making itself is responsible for somewhere between 5 and 10% of total greenhouse gas emissions worldwide. Meanwhile, the world is moving away from using coal for steel production and ghg free methods are starting to be implemented. Also, because the coal seam in Telkwa is associated with coalbed methane, there is a possibility of substantial methane releases during the mining of the coal. In order to determine the total greenhouse gas impact of this project, the dAIR should require a full review of all releases throughout all stages of development, production, transportation and use. RECOMMENDATION: That the AIR require sufficient information to allow an analysis of the full ghg effects of the project, including by its use in steelmaking and/or thermal coal operations, as well as the likely amount of methane release. That the AIR also requires information as to whether there are alternatives to using coal in steelmaking that will produces less harmful effect on the environment.	We are aware that the global steel industry is working on initiatives to reduce greenhouse gas (GHG) emissions. However, there is currently no commercially viable method for the primary steelmaking process without the use of metallurgical coal. Electric arc furnaces (EAF) are used in secondary steel production in which recycled scrap is required. The demand for steel greatly outweighs EAF production. According to Wood Mackenzie (a world renowned energy, metals and mining research firm) the world steel production ratio will remain as ~70% blast furnace output and ~30% EAF output through to beyond 2040. While there are some steel production pilot studies that are not using coal, it will take decades to become operational and widespread, if it is successful. Proof of concept trials of hydrogen in a blast furnace is not the same as being commercially viable (common and proven). Steelmaking coal is anticipated to be required for decades to come. GHG emissions from the project area including coalbed methane as well as haul road and rail infrastructure activities will be assessed. The inquiry will be addressed in the atmospherics/GHG chapter of TCL's Environmental Assessment (EA) Application (draft Application Information Requirements (AIR) section 4.1). A GHG assessment beyond the boundary of the project area is beyond the scope of TCL's EA Application.

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IR-01-172-i	Charlotte Euverman, Smithers BC, Canada	9. Air – Dust So far, air quality issues have not been addressed in any significant way. As news from Sparwood, B.C. establishes, running a coal mine can produce a significant amount of coal dust: http://www.cbc.ca/news/canada/british-columbia/sparwood-teck-coal-mine-1.4696904 https://www.thefreepress.ca/news/teck-to-compensate-sparwood-residents-for-dust/ Sources include blasting, as well as dust blown off waste piles and trucks and while loading and operating railroad cars. So far, we have not heard any significant discussion about how the dust would be controlled at the Telkwa mine site itself. In regards to transportation from the mine to the loadout by truck and from the loadout to the port by train, Telkwa Coal has referred to covering the product with some form of latex material, but there are no details. Even with such a system, coal dust from rail cars can still be a problem: https://www.columbiavalleypioneer.com/news/coal-dust-escaping-rail-cars-spurs-b-c-petition/ The Bulkley Valley already suffers from poor air quality. Our average PM 10 is also a problem, mostly from road dust in the spring. How will the blasting, processing, transportation and storage of the coal impact our air quality, especially given that the mine site is generally upwind from Telkwa and Smithers? RECOMMENDATION: That Air Quality should be treated as a Valued Component and the dAIR must require an assessment of how dust from the mine and associated transportation will affect air quality in the Bulkley Valley. Given the challenges that already affect air quality in this area, the review should take place with the objective of preventing any further degradation of air quality.	Potential dust emitting sources will be assessed from the minesite (including blasting), haul road and rail infrastructure, coal stockpiles and rock piles, truck hauling, loading and unloading activities. Potential effects of particulate matter (dust) including PM10 and PM2.5 will be assessed (draft Application Information Requirements sections 4.1 and 13.0). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for more information regarding pathway and receptor components. Air quality is a pathway and results of air dispersion modelling will be provided to the human health, wildlife, soil and vegetation disciplines to assess potential effects and significance.
IR-01-172-j	Charlotte Euverman, Smithers BC, Canada	10. Noise - Amount/Distance Obviously, between blasting and heavy truck traffic, the mine and loading operations will produce a significant amount of noise. So far, it appears that the only studies about how much noise will be produced are based on computer simulations. Together with the environment, the quality of life issues valued most by area residents focus on our quiet rural lifestyle (see Regional District Rural Official Community Plan Survey results, 2012). RECOMMENDATION: That noise should be treated as a Valued Component with the objective of preventing sound disturbance. Testing should be performed using methods that reasonably reflect real life conditions that occur in the Bulkley Valley.	Baseline noise measurements have been conducted in the vicinity of minesite and rail infrastructure. Noise modelling will be conducted with an approved software to predict potential noise effects from noise generating activities at the minesite, haul road, and rail infrastructure. Noise is a pathway and all potential effects will be assessed in the human health and wildlife sections. As per the draft Application Information Requirements, these will be covered in sections 4.1, 4.8 and 8.0.

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IR-01-172-k	Charlotte Euverman, Smithers BC, Canada	11. Load Out – Flood Plain/ Haul Road impact According to the Regional District map, the proposed loadout facility site is on a Bulkley River floodplain. From personal experience, we know that this site is subject to flooding from the River. So, the potential is there for flood waters to wash stored coal into the Bulkley. Tenas Coal's plan is to remove the land for the coal loadout from the ALR. This site is valley bottom, river side rich soil and we do not need to lose any of this vital farmland in the Bulkley Valley. As Tenas Coal intends to store the wash coal on the ground, this land will be polluted for years and the only way to clean it will be to remove the soil. The haul road's planned path crosses the Helps Creek wetlands watershed for 7 km. We think this wetland and creek should be getting the same consideration asTenas, Four and Goathorn Creeks. Our concerns here, in addition to the impact on caribou, are impacts to the watershed from road dust and the use of chemicals for dust suppression and these chemicals leaching into Helps Creek. As noted in the Caribou section, the haul road is also directly inconsistent with one of the main objectives of the Caribou recovery plan, which is to eliminate and not expand linear disturbances and to allow the herd to use the lower elevation forests in an undisturbed fashion. RECOMMENDATION: That the dAIR include a requirement for a comprehensive assessment of the potential impacts on the Bulkley River from flooding of the loadout site, on the ALR by removal of valuable agricultural land and on wildlife and aquatic environments along the haul road route.	(1/2) As described in the draft Application Information Requirements (AIR), topics raised will be addressed in sections 4.0 through 14.0. The terrain assessment will be in section 4.2 and the Effects of the Environment on the Project in section 10 will consider flooding. Project design section 1.3 will consider flooding potential and terrain stability in the placement of coal stockpiles. We will seek non-farm use on a total of 54.52 ha of Agricultural Land Reserve (ALR), and we will adhere to conditions set out by the Agricultural Land Committee (ALC). It is important to note that the land will not be removed from the ALR. We are applying for a non-farm use of the land. Opportunities for soil salvage within the rail infrastructure footprint, and reclamation of the area once the Project is complete, will be described in TCL's Environmental Assessment (EA) Application. Located on Private Land, the rail infrastructure occurs on a combination of forested land and hayland/pasture. Pending input and approval from the landowner — given the mixed land uses — this area may be reclaimed back to forested land via seeding and/or planting of native species, or reclaimed to pasture/hayland via seeding of mixed forage species to achieve capability for sustained perennial forage species and/or grazing, and thereby enhance agricultural land use. Draft AIR section 13.0 will include the Reclamation and Closure Plan.
IR-01-172-k	Charlotte Euverman, Smithers BC, Canada		(2/2) Wetlands will be assessed as a subcomponent of the Vegetation Valued Component (section 4.7 of the draft AIR). The Vegetation Local Study Area (LSA) has been delineated to include a large wetland complex located downgradient from Helps Creek to encompass potential indirect Project effects including alteration / loss of wetlands, and trace metals deposition on plants and soil. The assessment on caribou (section 4.8 of the draft AIR) will include a cumulative effects assessment that considers the existing and historical disturbances. Although wildlife management is not within our scope of authority, the assessment will provide information that is potentially useful to those responsible for management directives for Telkwa Caribou Herd. The draft AIR includes that soil quality (section 4.2) will be assessed with respect to change in physical and chemical properties of soil in context of land use capability. This will include context of soil/agricultural capability within the ALR.

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IR-01-172-l	Charlotte Euverman, Smithers BC, Canada	12. Recreation/Life Style impact Recreation is mentioned under the VC for land and resources. Outdoors recreation is one of the main features of the quality of life which Bulkley Valley residents value. The Hunters Basin/Hankin Plateau area is important to horseback riding and hiking enthusiasts. The mine site sits on top of the only access road into these areas. Will access be protected? RECOMMENDATION: That the dAIR include a study of recreational interests in areas impacted by the proposed mine development with a description of how those interests can be protected.	As noted, public recreation is a considered as subcomponent under the Land and Resource Use Valued Component (section 6.4 of the draft Application Information Requirements [AIR]). It is also a considered as an indicator in infrastructure and services (draft AIR section 6.3). The application of mitigation measures is part of the environmental assessment process, and will be considered accordingly in the assessments, including for these two valued components. The inquiry will be addressed in the land and resource use chapter of TCL's Environmental Assessment (EA) Application. In advance of TCL's EA Application, please refer to our Public Consultation Plan 2019 which lists the stakeholders we have consulted. The research will be presented in the baseline report. A public access plan will be presented in TCL's EA Application subject to government requirements (section 13.0).
IR-01-172-m	Charlotte Euverman, Smithers BC, Canada	13. Telkwa Coal Ltd. Finances and Bond Allegiance Coal, the company behind the Tenas Project, is a thinly capitalized Australian company with a weak financial position. The following information publicly available as of 2020-6-23 shows Allegiance Coal trading at a price of 7 cents per share, and that it has a market capitalization of only 40.28 million ASD, cash on hand of only 1.43 million ASD, with a debt of 2.32 million ASD, and a negative cash flow of 1.86 million ASD over the twelve trailing months. It has never operated a coal mine. If there were an accident or malfunction at the mine, or if an accidental release from the containment area occurred after the mine entered its reclamation and post-closure phase, then a reasonable question is: what resources are available to minimize the environmental and social impacts of the possibility of the company's inability to pay? RECOMMENDATION: • The AIR include an analysis of financial resources available for reclamation and long-term maintenance, as well as potential failure of the waste containment systems. • All sources of funding for remediation of unpredicted impacts and implementation of the closure plan should be specified.	Our commitment to operating safely and responsibly is a core commitment of our company and our entire team. Not only is this a value of our company, it is requirement for our permits. We are subject to the laws of British Columbia and Canada. While Allegiance Coal may be a small company, its joint venture partner and shareholder in Telkwa Coal, Itochu Corporation of Japan, is not. Itochu is a global fortune 500 company with US$34 billion of annual revenue, and more than 150 years of history. We are proud to be a global company that combines the expertise of our international board of directors with our local BC senior leadership team. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia. Government has revised their policies and mine code, partly in response to Mt. Polley. Mines cannot be constructed without posting a financial bond.

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IR-01-172-n	Charlotte Euverman, Smithers BC, Canada	14. Jobs and Economic Opportunities The dAIR refers to the jobs that would be created through the coal mine project. However, much of the economic opportunities that have arisen in the Bulkley Valley during the last few years have come from such sources as tourism, recreation, amenity migration, home construction and real estate. All of these sectors depend in whole or in part on the preservation of a lifestyle connected to nature and natural beauty. The introduction of an open pit coal mining operation with its associated noise, dust and effects on the natural world will obviously have some negative effects on these economic sectors. For instance, what impact will it have on property values, air and noise pollution and the fishing based tourism economy? RECOMMENDATION: The AIR should include a full spectrum economic impact analysis that includes a review of the possible negative economic consequences of the project.	Social and economic effects of the Project on a range of economic opportunities in the Local and Regional Study areas will be assessed as part of the Economic Development Valued Component (VC), Infrastructure and Services VC and Community Well-Being VC effects assessments (sections 5.2, 6.3, and 6.5 of the draft Application Information Requirements [AIR]). Similarly, potential air and noise effects on a range of land uses, including for example, tourism, public recreation, agriculture, hunting and guide-outfitting will be assessed as part of the Land and Resource Use VC effects assessment (draft AIR section 6.4) . Property values, housing prices, the demand for, and the availability of housing are considered in relation to the cost of living in assessment of the Community Well-Being VC (draft AIR section 6.5).
IR-01-172-o	Charlotte Euverman, Smithers BC, Canada	15. UNDRIP BC has adopted the principles of the UN Declaration on the Rights of Indigenous People. Those principles are applicable here since the mine site sits on the territory of the Wet'suwet'en people. RECOMMENDATION: All aspects of this process must comply with the obligations contained in the United Nations Declaration on the Rights of Indigenous People.	Our relationship with the Wet'suwet'en is of great importance to us. We signed a Communication and Engagement Agreement with the Office of the Wet'suwet'en (OW) in early 2017. The OW have granted us permission to access Wet'suwet'en territory for the purposes of conducting studies for our project. OW technicians have participated in our field studies. We have demonstrated our commitment to the Wet'suwet'en in agreeing to their request for an eight month pause in the Environmental Assessment Office (EAO) process from September 2019 to May 2020. We are committed to presenting a plan, answering questions, addressing concerns and continuing to follow the process the OW have set out for us.

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IR-01-173	Thomas Roper, Telkwa, BC	i have done some research on failed tailing dams and was surprised to see so many failures which begs the question as to why any corporation would want to place a dam or containment pond above a town like telkwa, 11 kilometers from the minesite. there is a certain arrogance in believing that an imminent failure cannot happen and the consequences can be devastating to the local population, the community, the fish and the entire watershed from telkwa to prince Rupert. most failures are man made and some are natural disasters. my question to telkwa coal would be, can you face the community after a failure, do you have the financial resources to mitigate a failure, can you justify a short term financial gain for a long term maintenance situation from now until the end of time? my question to e.a.o. is, what amount of a bond would be sufficient to cover these failures from now until the end of time?	We are committed to developing the Project in a safe and responsible manner, by meeting or exceeding required design guidelines. The dams will be constructed using the downstream construction method which is the safest dam construction technique and quite different to the methods of construction used in recently failed dams. A dam break analysis (section 9.0) will be conducted to aid in the development of a Mine Emergency Response Plan (section 13.0). The long term stability of the dam will consider resistance to large seismic events and extreme rainfall events both of which will be assessed in TCL's Environmental Assessment (EA) Application (section 10.0). The Project will be operating in line with the requirements of the Health, Safety, and Reclamation Code for Mines in BC. We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.
IR-01-174	Sara Tomlinson, Telkwa	I do not understand how valued components (VC"S) and intermediate components (IC's) are determined. In the application under the Environment Pillar, fish and fish habitat, Vegetation, Wildlife and Avian species are VC's, while ground water and surface water are intermediate components. This makes no sense to me - water is the most valued component (both surface and ground), especially in a mine that is so close to a community who relies on the rivers that will be effected. Any adverse change to the quantity (Telkwa Coal is estimating using 15,000 litres of water per hour), or quality of the water (proponent is planning a containment pond half the size of Tyee Lake to contain potential acid generating rock, plus any chemicals used in the mining process) will have a devastating effect on local wells, drinking water in nearby communities, fish and fish habitat, wildlife, vegetation, etc etc. Why is water not a valued component?	In response to feedback from the Office of the Wet'suwet'en (OW) and the public during the review of the Application Information Requirements (AIR), we looked at the use of the terms Valued Components (VC) and Intermediate Components (IC). We initially followed the Province of BC guidance (https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/guidance-documents/eao-guidance-selection-of-valued-components.pdf) on selecting VCs and ICs based on the technical definitions as either a receptor (VC), or pathway to a receptor (IC). To clarify our commitment to the importance of each, and every component, we have put aside the technical differentiation and are using Valued Components only. Please refer to Water Quality as an IC for the Tenas Project EA Scientific Memo: Hemmera 2020 and Use of Valued Components versus Intermediate (pathway) Components for the Tenas Project Scientific Memo: TCL 2021 on EPIC for a more detailed explanation. Water quality is evaluated based on guidelines derived from biological endpoints in toxicity data (e.g. effects to fish or humans). These components could be renamed "pathway" (water) components and "receptor" (biota) components. Water quality and quantity and physical interactions with fish habitat are key elements of the effects assessment that will be conducted. As described in the draft AIR, these topics will be addressed in the water, aquatic resources, fish and fish habitat, wildlife, land use, human health, Wet'suwet'en Rights and Interests, and management plans chapters of TCL's Environmental Assessment (EA) Application (draft AIR sections 4.3 to 4.6, 4.8, 6.4, 8.0, 11.0, and 13.0).

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IR-01-175	Thomas Roper, Telkwa, BC	the virtual open houses were in my opinion a continued regurgitation of past information from telkwa coal. i was not able to refute an answer and seek more information from angela or dan. we cannot let this enviromental assessment pass without a public question and answer forum. we are now able to have meetings with 50 people and we could use the telkwa stage at the barbeque grounds. this is too important of an issue to slide through with an excuse of covid 19. the long term consequences for this community could be devastating. my question is, can we have a direct face to face question and answer forum similar to c.b.c.'s Q & A during the federal election?	As noted, due to the COVID-19 pandemic and provincial health guidance, it was necessary for the Environmental Assessment Office (EAO) to adjust the format of the open house. In recognizing the change to the virtual format, the EAO made several accommodations; hosting two open houses instead of one, extending the public comment period from 30 days to 45 days, having the events on different days of the week (Tuesday and Wednesday) and also during different times of day (1-3 pm and 5-7 pm) to include as many people as possible. Comments were not limited to the open house event days. The EAO allowed public comments for 45 days. TCL will address every question posted by the public on the EAO website. Please also note that TCL held three in-person open houses in 2018 and 2019. As well, the community is always welcome to visit our Telkwa office to review the many project boards and infographics with our Telkwa-based team. Many of the questions received from this commenter are related to information to be presented in the next phase of the process, the Environmental Assessment (EA) Application review. We are currently at the pre-application draft Application Information Requirements phase. Your inquiries will be addressed in TCL's EA Application. Once TCL's EA Application is submitted, we will hold in-person open houses, if permitted by health authorities.
IR-01-176	Sara, Telkwa	On page 17 the following statement is made: Because Telkwa Coal is a junior mining company with very limited project holdings, there are no viable technically and economically feasible projects available to Telkwa Coal within Canada. The application process should include a detailed analysis of the financial resources of this company, that will show that they have the financial ability to build, operate, reclaim the mine using best practices, and have the resources to mitigate any potential problems created by mining coal in such close proximity to Telkwa and Smithers. The amount of any bond should be disclosed, and should be substantial to ensure that any problems will be fixed to the satisfaction of those living in the area affected by the mine.	We will be required to post a financial bond prior to construction as part of the permitting process. The final amount of bonding will be determined by the Government of British Columbia.

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IR-01-177	Thomas Roper, Telkwa, BC	it is important to understand the relationship between the people, the land and the government. the people pay the taxes which pay the wages for the government . the people own the land and resources. the people are the stewards of the land. the government works for the people to protect the land and the resources. if the land is threatened, the resources are compromised, then the governments role is to protect these for the people. this proposed mine development has the potential to threaten the people, their air, their water, and their lifestyle. it is the governments responsibility to mitigate these threats. my question to the e.a.o. would be, can you accept this responsibility and refuse to give telkwa coal the opportunity to destroy our watershed?	Your perspective is noted. While it appears that this comment is addressed to the Environmental Assessment Office (EAO), we will provide the following. We are committed to meeting regulatory requirements, and to operating in a safe and environmentally responsible manner. We are following the Environmental Assessment Process as established by the BC Environmental Assessment Office. Technical Working Groups are a required part of the process, and we are working with the Wet'suwet'en, the public servants in multiple ministries, local governments, and the Bulkley Valley Community Resources Board address the technical aspects of the project.
IR-01-178	Anonymous, Telkwa	Regional Planning and Resource Development Attached Document: Scan_20200724 (002).pdf	Thank you for taking the time to comment. The document you attached was blank.