



**Montem Resources**

**Montem Resources Alberta Operations  
Limited**

**Tent Mountain Mine Redevelopment  
Project**

**Initial Project Description  
Plain Language Summary**

**November 2021**

**Submitted to:**

Impact Assessment Agency of Canada

**Submitted by:**

Montem Resources Alberta Operations Limited

*This page left intentionally blank*

## Table of Contents

<b><i>PLAIN LANGUAGE SUMMARY</i></b> .....	<b>1</b>
<b><i>Part A General Information</i></b> .....	<b>2</b>
<b><i>Part B Project Information</i></b> .....	<b>5</b>
<b><i>Part C Location Information</i></b> .....	<b>7</b>
<b><i>Part D Federal, Provincial, Territorial, Indigenous and Municipal Involvement</i></b> .....	<b>11</b>
<b><i>Part E Potential Effects of the Project</i></b> .....	<b>12</b>

## PLAIN LANGUAGE SUMMARY

Montem is proposing a re-start and expansion of the existing open-pit Tent Mountain Mine (TMM) in southwestern AB and the southeastern edge of BC for the extraction and export of metallurgical (steelmaking) coal to international markets. The proposed project is known as the Tent Mountain Mine Redevelopment Project (TMM Project). Most mining activities and disturbance is within the Province of Alberta (AB), with a small expansion required within the Province of British Columbia (BC). Various infrastructure components will require amendments to both the AB and BC Mine permits.

The TMM Project team started their initial baseline studies in 2018 related to aquatics, biophysical, cultural heritage, social-economics, and mining assessments. These baseline studies are to support the environmental impact assessments for the TMM Project area in preparation of the submission of federal and provincial applications.

Montem has been engaged with stakeholders, Indigenous communities, and regulators for the past four years, providing information about the proposed TMM Project and identifying any issues or concerns. Although COVID-19 presented challenges to our engagement and consultation strategies, Montem adapted to keep communication as open and transparent as possible. Feedback and responses towards the TMM Project have recorded both positive and negative concerns, both of which will and/or have been addressed in planning, mitigation measures and monitoring programs

The main components of the TMM Project's infrastructure include access roads, power, on-site building and facilities, open-pits, water management, and train loadout (TLO). As the TMM Project mining operations will take place wholly within the previously disturbed Mine Permit boundary, to date, no new potential adverse impacts to rights or current traditional use have been identified, or new adverse impacts to Indigenous physical or cultural heritage, historical or archaeological interests or to their health, social or economic conditions.

Montem has been fully engaged and will continue working closely with Indigenous peoples to assess potential impacts to their rights and interests and to identify opportunities for them to participate in the TMM Project. Indigenous communities have expressed an interest in employment and business opportunities, in being involved in the reclamation of the mine site following production and for regaining greater access and use of the area for hunting and other traditional uses.

The following Plain Language Summary is presented in a format that aligns with the guidance for submission and review of Initial Project Description (IPD) under the Impact Assessment Act - Information and Management of Time Limits Regulations (SOR/2019-283).

## Part A General Information

1. The Project name is the Tent Mountain Mine Redevelopment Project (TMM Project).
2. The name and contact information in Section 3 of the IPD and is:

Peter Doyle  
Chief Executive Officer  
Montem Resources Alberta Operations  
Ltd  
600, 12222 Stony Plain Road  
Edmonton, Alberta T5N 3Y4  
[pdoyle@montem-resources.com](mailto:pdoyle@montem-resources.com)

Nathan Archer  
Manager, Exploration and Field  
Operations  
Montem Resources Alberta Operations  
Ltd  
7720, 17<sup>th</sup> Avenue  
Coleman, Alberta T0K 0M0  
587-425-5995  
[info@montem-resources.com](mailto:info@montem-resources.com)

3. Engagement on the re-opening of the TMM has been ongoing with the Public since 2017. Employment, economic stimulus, and implementation of modern reclamation methodology for the TMM Project has dominated the discussions. These engagement activities, described in detail in the Initial Project Description, have included in person meeting, open houses in the community, engagement at community events and trade shows as well as the development and staffing of our office in Coleman, Alberta. Montem's local office remains open and Montem intends on ramping up engagement activities with the communities once there is an indication of issues resulting from the IPD process.

Summary of Stakeholder consultation

Stakeholder group	Email	Phone call	Meeting	Attended community event	Factsheets	Site tours	Intercept survey	Advertising	Presentations	Door knocking	Drop-in events	Attend community office
Impacted residents	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓
Interested community	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
Municipal	✓	✓	✓		✓				✓			✓
Government agencies	✓	✓	✓		✓	✓			✓			✓
Provincial government	✓	✓	✓	✓	✓	✓						
Elected representatives	✓	✓	✓	✓	✓	✓					✓	✓
Community organizations	✓	✓	✓	✓	✓		✓	✓			✓	✓
Business associations	✓	✓	✓	✓	✓							
Local businesses	✓	✓	✓	✓	✓					✓	✓	✓
Media	✓		✓	✓	✓						✓	✓

4. A total of fourteen Indigenous communities and groups have been contacted (Table below) with consultation and engagement initiated to learn their traditional uses of the TMM Project area. Engagement on the re-opening of the TMM has been ongoing with the Indigenous community since 2017. Formal Indigenous engagement activities are ongoing including the regular filing of the required Record of Consultation (ROC) with the Alberta Aboriginal Consultation Office (ACO). Our local office remains open and Montem intends on ramping up Indigenous communities' engagement once we have an indication of any new issues resulting from the IPD process. Initial feedback from Indigenous communities indicated that:

- traditional rights to hunt and gather are expected to be potentially impacted
- the TMM Project is located within an existing disturbed mine site and the communities currently have very little access.
- several of the Indigenous communities have expressed interest in the employment and economic opportunities associated with the TMM Project

- Indigenous communities have identified a desire to participate in the reclamation of the mine site and to gain increased access for traditional use purposes upon closure
- water sustainability, quantity and quality is also a concern

<b>List of Indigenous Community Contact</b>
<b>Kainai Nation (Blood Tribe)</b>
<b>Piikani Nation</b>
<b>Siksika Nation</b>
<b>Stoney Nakoda Nation (Bearspaw Band)</b>
<b>Stoney Nakoda Nation (Chiniki Band)</b>
<b>Stoney Nakoda Nation (Wesley Band)</b>
<b>Tsuut'ina Nation</b>
<b>Samson Cree Nation</b>
<b>Metis Nation of Alberta Region 3</b>
<b>Foothills Ojibway First Nation</b>
<b>Ktunaxa Nation</b>
<b>Shuswap Indian Band</b>
<b>Metis Nation of British Columbia</b>
<b>Elk Valley Metis Nation</b>

5. There are no studies or plans relevant to the TMM Project that is being or has been conducted of the region where the TMM Project is to be carried out, including any Regional Assessment carried out under the Impact Assessment Act, or by any jurisdiction including by or on behalf of an Indigenous governing body, where the study or plan is available to the public. There have been regionally pertinent applications for other project approvals that will be incorporated into the cumulative assessment of the TMM Project.
6. The Government of Canada has announced that Environment and Climate Change Canada (ECCC) has developed the strategic assessment of climate change (SACC). The SACC was deemed a strategic assessment under Section 95 of the Impact Assessment Act.

## Part B Project Information

7. The purpose of the TMM Project is to re-open, complete and execute proper closure of the TMM. The need for the TMM Project is to provide a high-quality metallurgical coal product to the steel making industry.
8. The TMM Project was designated under Section 9 of the IAA. Section 9 describes the Minister of Environment and Climate Change’s authority to designate a Project for review under the IAA. Although the TMM Project did not meet either the production or size increase thresholds for expansion to an existing operation, on June 28, 2021, the Minister designated the TMM Project as a project subject to the Act. The decision referenced that the TMM Project “may cause adverse effects to transboundary environments, Indigenous peoples, and fish and fish habitat, given the uncertainty related to the *effectiveness of proposed measures to avoid deposition of selenium and other deleterious substances.*” The decision also referenced the “*public concerns related to these potential effects and the context that the entire Project is not captured in a single provincial assessment*”.
9. The TMM Project will include all activities associated with the existing open pit mining and resumed activities of coal cleaning, transportation to a train load out (TLO) and transport to market through the Port of Vancouver. New facilities will be required for the coal plant (CHPP) and TLO. Table 6, from the Initial Project Description, provides a schedule and brief description of the TMM Project activities to be completed.

Year	TMM Project Phase	TMM Project Activities
0-2	<b>Pre-construction and Construction</b>	<ul style="list-style-type: none"> <li>• Site clearing, grubbing, timber, and brush clearing</li> <li>• Soil salvage and stockpiling</li> <li>• Construction of powerline, TLO and CHPP</li> <li>• Upgrades and construction of water management structures and facilities</li> <li>• Construction of mine haul road to the Rail Loadout</li> <li>• Construction of supporting infrastructures</li> </ul>
2-17	<b>Operational</b>	<ul style="list-style-type: none"> <li>• Blasting and removal of waste rock</li> <li>• Mining and processing of raw coal</li> <li>• Water Management</li> <li>• Progressive reclamation opportunities</li> <li>• Transporting to market</li> </ul>
18-20	<b>Reclamation</b>	<ul style="list-style-type: none"> <li>• Contouring or waste rock dumps to acceptable configuration</li> <li>• Decommissioning and reclamation of roadways</li> <li>• Cover soil and seed for closure</li> </ul>
21+	<b>Decommissioning and Closure</b>	<ul style="list-style-type: none"> <li>• Contouring of waste rock dumps to acceptable configuration</li> <li>• Ongoing monitoring and maintenance</li> <li>• Decommissioning and reclamation of roadways and powerline corridors</li> </ul>



10. The TMM Project is estimated to produce 1.8 million tonnes of run of mine (raw) coal per year. This yearly production will peak at 4,925 tonnes per day based on the maximum anticipated operations. The TMM Project will utilize standard mining processes to complete the recovery of coal from the remaining reserves at the TMM.
11. The timeline of the TMM Project is a 21-year timeline. This includes
- 2 years to build
  - 15 years to operate
  - 2 years to complete the progressive reclamation activities
  - 2 years to finalize decommissioning and closure
12. Alternative means to the TMM Project are somewhat limited by the constraints of the existing and past activities. As part of Montem's TMM Project Mine Feasibility Study, a range of alternatives means assessments were carried out. All key components of mine planning execution were included in the alternative means analysis:
- mining type;
  - mine configuration;
  - rail and loadout facility location;
  - clean coal transport;
  - CHPP fines management (coal dewatering);
  - water and selenium management;
  - coal lease development;
  - rail haul;
  - energy source;
  - water supply;
  - employee accommodation; and
  - non-rail transportation.

Alternatives to the TMM Project considered included development of other resources available to Montem or the purchase of/expansion of other mining projects. All the alternatives to the development to the TMM Project require additional capital investment, incur the risk of significant delays, and were rejected in favor of the current plan for the TMM Project. The TMM Project offers the minimum risk of additional impacts associated with a new project, minimize the economic risks associated with the acquisition of an existing project and presents to maximum positive effects impacts associated with the resumption of activities/completion of the previous mining.

## Part C Location Information

13. A figure is attached to the document that clearly illustrates the spatial locations of the TMM Project Components. The existing TMM is located approximately 16 km southwest of the Town of Coleman within the Municipality of Crowsnest Pass and nearby communities include, Blairmore 20 km to the east and Sparwood (BC) is 22 km to the northwest. The nearest residence to the TMM Project is greater than 5 kilometers from the proposed CHPP location. There are no other permanent, seasonal, or temporary residences potentially affected by the TMM Project. The TMM Project straddles the AB and BC border. The TMM Project geographic coordinates is centred at approximately:

UTM: 665,883.53 m N 5,493,599.17m N

Latitude: 49°34'20"N

Longitude: 114°42'20"W

The nearest Federally controlled lands are the Dominion Coal Blocks, located 2.5 kilometers to the west of the TMM Project. There are no publicly announced plans to develop these resources and the TMM Project will not have any direct impacts to this property. Other Federal lands in the TMM Project vicinity include the Piikani Nation which is 68 kilometers to the east. There are no expected direct impacts to Federal Lands because of the carrying out of the TMM Project. The Dominion Coal Block is outside the direct footprint of the TMM Project and not expected to be impacted. The Piikani Nation will not likely be directly impacted by TMM Project activities, however the impact assessment will closely examine the potential for indirect effects because of water and air quality components of the TMM Project.

The TMM Project area is owned by Montem and is comprised of freehold coal titles and coal leases that encompass an area of approximately 1,931 ha. It includes 11 AB coal leases, one BC coal lease and 10 freehold AB Land titles (Figure 3). In addition, Montem holds five freehold titles with surface rights only. Four of these overlap coal leases owned by Montem and one is northeast of the main TMM Project area covering the access road.

Table 7 of the detailed IPD provides the complete listing of all lands required for the TMM Project. As part of the Impact Assessment, Montem will provide details on TMM Project titles, leases, and other access agreements/instruments.

TMM Project Land Location									
Quarter Section	Sec	Twp	Rge	Meridian	Quarter Section	Sec	Twp	Rge	Meridian
NE 1/4	11	7	6	W5	NW	13	7	6	W5
NW 1/4	12	7	6	W5	SE 1/4	22	7	6	W5
	13	7	6	W5	NE 1/4	22	7	6	W5
E 1/2	14	7	6	W5	SW 1/4	23	7	6	W5
NW 1/4	14	7	6	W5	SE 1/4	23	7	6	W5
E 1/2	22	7	6	W5	NW 1/4	23	7	6	W5
SE 1/2	23	7	6	W5	NE	23	7	6	W5
W 1/2	24	7	6	W5	SW 1/2	24	7	6	W5
SE 1/4	24	7	6	W5	NW 1/4	25	7	6	W5
W 1/2	25	7	6	W5	SW 1/4	25	7	6	W5
E 1/2	26	7	6	W5	SW 1/4	26	7	6	W5
W 1/2	36	7	6	W5	SE 1/4	27	7	6	W5
SE 1/2	11	8	6	W5	SW 1/4	12	7	6	W5
W 1/2	1	8	6	W5	SW 1/2	12	8	6	W5

Table 7 – Initial Project Description

14. The existing environment is a mixture of previously mined/developed areas, partially closed areas, and undisturbed areas where new activities are proposed. The TMM Project is in the Rocky Mountain Natural Region, which is characterized by highly variable topography, geology, and vegetation. The mountain is approximately 5 km long, trending north south and is approximately 1.5 km wide. The north to south and east to west variation in bedrocks across this Natural Region result in the highly variable physiographic nature of this region and the characteristic vegetation distributions. The vegetation is indicative of the Montane and Subalpine Natural Subregions.

The detailed IPD should be referred to for the complete description, but for this summary, the environment in and around the TMM Project is well known to Montem. As part of the assessment process, the existing environment is being closely examined and a detailed description will be provided at the time of the impact assessment.

15. The current health, social and economic context of the region where the TMM Project is located will be detailed in the impact assessment process, however Montem has gained insight into this component through our public consultation, Indigenous engagement, and employees. The region impacted by the TMM Project is generally like the rest of the Provincial averages for both BC and Alberta with the general exceptions of age and age-related health challenges experienced by those in the region. The socio-economic potential for the TMM Project is expected to be primarily in the communities of Crowsnest Pass due to its proximity to the mine, and Sparwood, which is the nearest service centre for the large-scale local mining industry.

The key socio-economic value components assessed fall into the following categories:

- personal and business income;

- government tax and royalty income;
- population;
- regional infrastructure and services, including:
- housing, including worker housing;
- social infrastructure (e.g., health, education, policing, emergency, recreation, and social services);
- municipal infrastructure and services;
- transportation effects; and
- traditional land use.

The TMM Project will create positive economic and fiscal effects for the community and is estimated to create:

- 30 person years of engineering employment prior to and during construction;
- 200 person years of on-site and off-site employment related to the construction of the plant, facilities, and infrastructure for the mine between Year 0 to 2; and
- approximately 175 long-term operations positions to be hired from Year 2.

Once fully operational, the TMM Project will add an estimated \$1.5 million annually in property taxes to the Crowsnest Pass. The TMM Project will also contribute to provincial and federal corporate income taxes and provincial royalties over the 14-year operating life of the TMM Project.



## Part D Federal, Provincial, Territorial, Indigenous and Municipal Involvement.

16. The TMM Project has not applied for, been approved for, or received any financial support from Federal authorities. In addition, it is not proposed or anticipated that the TMM Project will apply for or receive financial support from Federal authorities in the future.
17. No federal land will be used for the restart of the TMM Project. Table 7 of the IPD summarizes the legal land descriptions of the TMM Project.
18. The IPD details the existing approvals and licences that the TMM Project currently holds as well as a description of Montem’s current understanding of the other authorizations that might be required.

Federal Jurisdiction	Legislative Acts	Related/Expected Permits
Impact Assessment Agency of Canada	<ul style="list-style-type: none"> <li>• <i>Impact Assessment Act</i>, 2019</li> <li>• <i>Migratory Birds Convention Act</i>, 1994 (MBCA)</li> <li>• <i>Species at Risk Act</i>, 2002 (SARA)</li> <li>• <i>Fisheries Act</i>, 2019</li> </ul>	Notice of Determination and Decision statement for Impact Assessment (if required)
Environmental and Climate Change Canada	<ul style="list-style-type: none"> <li>• <i>MBCA</i>, 1994</li> <li>• <i>SARA</i>, 2002</li> <li>• <i>Fisheries Act</i>, 2019</li> </ul>	SARA Permit
Fisheries and Oceans Canada	<ul style="list-style-type: none"> <li>• <i>SARA</i>, 2002</li> <li>• <i>Fisheries Act</i>, 2019</li> </ul>	<i>Fisheries Act</i> Authorization SARA Permit

## Part E Potential Effects of the Project.

19. The potential effects of the TMM Project will be the subject of the Impact Assessment process. At this point in the TMM Project Montem is examining potential effects on;
- a. Fish and fish habitat
    - Existing water quality in the area appears to present potential effects due to several components of concern. Downstream effects may already be occurring because of the existing environmental conditions. The TMM Project to restart the operation will present operational criteria that will reduce these components to downstream areas both in the short and long terms.
    - The planned disturbance footprint of the TMM Project will not directly affect fish or fish habitat.
  - b. Species at Risk.
    - Several wildlife, aquatic and vegetation species at risk have been identified in the area of the TMM Project.
    - The planned disturbance footprint of the TMM Project may directly affect species at risk or habitat necessary to species at risk.
    - Avoidance or mitigation plans are in preparation and will be presented as part of the assessment process.
  - c. Migratory birds.
    - The proposed TMM Project may affect migratory birds largely related to direct and indirect loss and/or alteration of habitat. There may also be increased mortality risk.
    - Other potential effects on migratory birds resulting from construction, operations, and closure of the TMM Project may include increases in ambient concentrations of criteria air contaminants, or accidental spills of deleterious substances (e.g., wildlife health).
20. Expected changes because of the TMM Project to Federal lands, other provinces, or countries will be examined as part of the assessment process.
- The nearest Federal lands are well outside the footprint of the TMM Project and will therefore not experience any local direct changes. Indirect effects from TMM Project components associated with changes to regional changes to air or water quality, are expected to be mitigated by existing environmental/technical processes.
  - The TMM Project will result in changes to the Provinces of Alberta and BC, however those changes will be either within the existing mine area or as contemplated in the originally approved authorizations. Indirect changes will be examined as part of the assessment process. Effects outside of Canada because of the current state of the TMM Project will not change if the TMM Project does not proceed.

21. Initial feedback from Indigenous communities, which is based on early engagement, indicated that the TMM Project has the potential to impact traditional rights to hunt and gather and that potential impacts to water sustainability, quantity and quality are also a concern. The TMM Project is within the traditional lands of 13 Indigenous groups and is 68 km to the nearest reserve, the Piikani Nation. Montem has specifically focused on engaging with a broad range of surrounding Indigenous communities as the original TMM approvals in the 1970's did not include the same levels of engagement. As the TMM Project is currently in existence and land access restricted by historic authorizations, Indigenous use of the area for traditional or other purposes is limited.

Any new areas of the TMM Project will be reviewed by affected Indigenous groups and consent obtained. Based on this early engagement, and the dialogue that continues, Montem is confident that any potential impacts to Indigenous Peoples physical or cultural heritage, current uses of the lands or structures/sites will be identified and understood. As work continues to resume the operation, Indigenous groups are conducting a variety of site visits, tours, and studies of their individual traditional and current uses of the TMM Project.

22. At this early stage of the process, Montem has had no direct input on the potential changes to the health, social or economic conditions of Indigenous peoples because of the TMM Project. Our initial engagement with the Indigenous groups to introduce the TMM Project has established the framework for further engagement, which will continue as part of the assessment process.

23. An estimate of the greenhouse gas emissions for the TMM Project is provided in the IPD and will be detailed in the assessment process. At this point in the TMM Project, Montem's best estimate is that approximately 100,000 tonnes of CO<sub>2</sub> annually will be produced by TMM Project.

24. Wastes and emissions from the TMM Project will be detailed as part of the assessment process. Waste is defined as any unwanted non-recyclable solid or liquid material that is intended to be treated or disposed of. Waste also includes refuse and garbage. As outlined in the Alberta User Guide for Waste Managers (AEP, 1994) the generator is responsible for classifying its waste and determining the proper disposal procedure for each waste product. Montem will investigate and evaluate required waste disposal activities but does not anticipate the TMM Project will generate any specific waste management concerns.

Waste is also materials expected to be generated by the TMM Project that require specific handling, disposal, or remediation planning. These materials include:

- Waste rock from mining operations
- Fine materials produced by the CHPP
- Fine materials released during the coal transportation and loading process.



Waste rock. Montem has undertaken a geochemical characterization of waste rock for the TMM Project to support the development of geochemical design criteria for water and waste management, and the development of geochemical inputs into water quality predictions. The program design was site-specific but based on learnings and experience from similar programs in the Elk Valley that have resulted in an appropriate level of characterization of host rocks and process wastes. Montem has determined that the geochemical and water quality effects assessments show that specific waste and water management measures may be needed to mitigate selenium leaching and the potential leaching of explosives residuals on water quality and stream sediments. The geochemistry and mitigation results will be provided as part of the AER EPEA and *Coal Conservation Act* (CCA) operating approvals amendments. Initial assessment results anticipate that, with known management and mitigation techniques, the effects of mine wastewater can be avoided or mitigated.

Fine Materials. The process of mining, cleaning and transportation can at several points create fine particulate matter in the form of coal and rock fines that will be reviewed as part of the assessment process. Rejected and fine materials, unsuitable for shipment as a finished product, is diverted from the CHPP for handling and disposal. Also referred to as coal tailings, Montem's design is to dewater this material at the CHPP and return the dry coal material to the mining area for incorporation into the backfilling operations.

The TMM Project may also produce fine (dust) material susceptible to wind erosion and potential releases from the operations. During mining operations, dust mitigation will be required to ensure that all on-site and off-site releases of dust are managed to follow the anticipated operating conditions. Coal dust can also be a potential impact associated with the clean coal loading and transportation processes. As part of the assessment process, Montem will examine potential effects associated with this aspect of the TMM Project and develop mitigation plans and processes.